PATHWAYS TO THE ACCIDENT AND EMERGENCY DEPARTMENT

Report of a study of the use made by patients of an accident and emergency department

by

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with assistance of E.P. Abson and J.R. Butler

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Summary

Introduction

This study had the aim of exploring the various pathways followed by patients attending an accident and emergency department and the reasons why these pathways were taken.

The major focus of the study was to examine the empirical validity of the propositions developed by the Casualty Surgeons' Association (1973). The suggestion in these propositions is that the work of the Accident and Emergency departments should consist of the provision of medical services in emergency situations. They argue that emergencies should be defined in social rather than clinical terms. Patients whose choices of alternative sources of medical care are limited by their social predicament might be seen by the C.S.A. as legitimate attenders at the accident and emergency department. In that the accident and emergency department is seen to be providing a 'community' emergency service then social predicaments are defined in terms of predicaments that occur in community settings. Predicaments are episodes which take place in the community and which lead to injury or ill health and disrupt the 'normal' flow of daily activities in public life. The major aim should be to restore these activities back to their normal flow and the patient is taken to the accident and emergency department and the predicament is resolved.

Research Objectives

The specific aims of the study were as follows. The study was divided into two parts.

(1) A random sample of attenders at the accident and emergency department of the Kent and Canterbury Hospital were studied. The aims of this part of the study were threefold:

(a) to gain an overall picture of the characteristics of the caseload of the accident and emergency department over a period of one year.

(b) to gain an overall picture of how, where, when and why patients come to an accident and emergency department, thereby providing part of the information necessary to test the C.S.A.'s proposition.

(c) using the data collected in (a) and (b), to examine the relationship between various factors and the patients' initial choice of medical care system.

(2) The second part of the study examined the 'circumstantial' element in more depth. In particular, a small number of 'episodes', all selected from the main sample, embracing a variety of locations where episodes occurred involving contact with the police, teachers, employers, first aid personnel and lay others were examined.

Research design

1 (a). Characteristics of the case load

The typical attender was the young male. New attenders at the Kent and Canterbury A.E.D. presented predominantly traumatic conditions. Using medical classifications only, a maximum of 50% of the patients could be classified as 'appropriate' attenders; 59% of the patients defined the episode that they were involved in as an emergency.

1 (b) The various pathways taken by patients to get to the A.E.D.

Socio environmental characteristics of the episode

1. Sixty four per cent of the 'episodes' happened away from the patients' private home.

2. Sixteen per cent of the patients were not permanent residents in the catchment area of the hospital.

Pathways to the accident and emergency department

1. In 46% of the episodes patients said they did contact the medical services as soon as possible after the onset of the episode.

2. Thirty per cent of the episodes involved decisions to seek medical care being made at a location other than at the site of the episode. The most common location for the decision to seek medical care was the patient's home (43%).

3. In 81% of the episodes patients had contact with at least one person about their injury or ill health and the majority of these contacts were close relatives.

4. In 27% of the episodes the decision to seek medical care was made by a person other than the patient or patient's relative.

5. In 26% of the episodes an attempt to contact a G.P. was reported to have been made and 15% of the patients actually saw or spoke to a G.P. before going to hospital.

6. In 20% of the episodes patients said they went by ambulance to the A.E.D.

7. In 6% of the episodes, patients said they went to another casualty department before going to the A.E.D. at the K. and C.

The analysis of the pathways that patients followed to get to the A.E.D. showed that overall, 144 different routes were followed. The most common pathway had the following characteristics:-

- Site of Episode at home, decision to seek medical care made as quickly as possible, site of decision to seek medical care outside home, no information given by relative, decision to seek medical care made by non relative, no attempt to contact a G.P., ambulance called and taken straight to A.E.D. = 7% (n = 628).

1 (c) Analysis of the factors related to choice of medical care system

With regard to the C.S.A.'s proposals about the significance of circumstances or predicaments in influencing the choice of medical care system, the results of the analysis showed that factors such as the site of the decision to seek medical care and the status of the person who gave advice to the patient or who actually made the decision to seek medical care may play a significant part in influencing the choice of medical care. Factors such as the type of clinical condition that the patient suffered from were also associated with choice of medical care setting.

2. Results of in-depth study of episodes involving other people such as the police, teachers or employers

The evidence suggested that when an episode occurs in settings usually outside the home and contact occurs with either teachers, employers, police or bystanders, then there is a stronger probability that the patient will go to an accident and emergency department than to their G.Ps.

The reasons for this vary according to the setting:-

1. In educational institutions teachers seldom or never took children to G.Ps. or brought G.Ps. in for medical reasons, for reasons of convenience, or for ethical reasons.

2. In work situations employers or their representatives took or referred employees to the accident centre rather than G.Ps. for reasons that could be described as medical, reasons of convenience and efficiency and reasons that could be loosely termed economic.

3. In episodes that occurred on the road or in the street police preferred to use the accident centre rather than G.Ps. because in the case of road accidents or illness in the street the ambulance was the most important source of help and ambulances went to the accident centre. The reasons given for use of the ambulance were medical, reasons of convenience for both the patient and themselves and reasons of economics. In other cases where criminal behaviour was suspected the accident centre was used as a source of medical opinion for use in litigation.

4. In episodes that occurred in recreation areas sufferers had limited contact with officials such as wardens, managers, or first-aid men. Much of the decision making involved lay people mainly family, friends and bystanders and when decisions were made at the site the preference seemed to be towards the use of the accident and emergency department.

Discussion and Implications for Policy

The results from this study imply that the C.S.A.'s proposition that emergency work should be defined in terms of social circumstances or predicaments appears to be well founded in the realities of human behaviour in emergency situations. Thus the proposition that the service should be seen as a 'community emergency service' appears to be a realistic principle on which the service could be organised. However, some patients utilised the hospital for reasons other than those that could be termed circumstantial. Many of these patients required medical treatment for a specific medical complaint, usually a traumatic one, and saw the hospital

rather than the general practitioner as the most appropriate setting for treatment. Thus policy making must also embrace the needs of this group who do not see their general practitioner as the focal point for all types of complaints. If the proposed policy involves attempts to re-educate the patient about the 'appropriate' use of the accident and emergency department it will have to convince the patient that there are alternative sources of medical care particularly for the treatment of some traumatic conditions and in situations where medical attention is needed quickly these alternative sources are accessible.

Chapter 1

The Casulty Surgeon's Association's proposals and the position of this approach within the development of the services

In a paper published by the Casualty Surgeons' Association in 1973, entitled an Integrated Emergency Service (Casualty Surgeons' Association), it states that the objective must be to create 'a single authority experienced in all aspects of emergency medicine and with the primary responsibility of maintaining an efficient emergency service at all time'. Perhaps, more significantly, the paper offers an apparently novel definition of what emergency work shall consist of. In the more recent past, whilst there appears to be a lack of agreement about what is to be considered as 'appropriate' casualty work, the criteria on which the varying definitions of 'appropriateness' are based tend to be medical ones.

The C.S.A., on the other hand, suggests that the work of Accident and Emergency departments does (or should) consist of the provision of medical services in emergency situations. The element of emergency attaches less to the clinical severity of the illness or injury and to the complexity of the treatment and more to the circumstances under which the illness or injury occurs. The Accident and Emergency department in this view exists to serve the medical needs of patients that cannot be served elsewhere. These needs incorporate social as well as clinical elements. Implicit in this view is that 'appropriateness' of attendance at Accident and Emergency departments is to be judged not solely in medical terms, (for a large proportion of the conditions treated by the departments may be equally capable of treatment by general practitioners), but also in terms of whether treatment could have been obtained elsewhere with no additional costs to the patient of time and inconvenience. If such alternative treatment could not have been obtained, then attendance at the Accident and Emergency department is legitimate, regardless of the nature of the illness or injury.

The major objective of this study is to examine the empirical validity of the C.S.A.'s proposals. Before this empirical research is described these proposals with their attendant assumptions about patient behaviour need to be examined in more detail. Perhaps, one of the more fruitful ways of understanding the principles behind the C.S.A. proposals is to examine them in terms of the general development of the casualty or accident and emergency services in this country. By placing them in this

historical context it should become apparent how and why such proposals arise in the first place. Therefore, this chapter will be divided into two parts. In the first part the C.S.A's proposals will be outlined in more detail and placed in the context of the development of accident and emergency services in this country since the end of the second world war. The second part will contain a brief historical account of the development of the 'casualty' service since the 19th century and show how the C.S.A's proposals are well founded in the history of the development of the casualty services.

1. The development of the accident and emergency services in this country since the war

Although marked changes in the structure of the health care system did occur in this country in 1948, one of the areas which appears to have been neglected is the casualty service. This is surprising given the interest in the area. For example, a report by the N.P.H.T. in 1960 states:

> 'The interest of the Nuffield Provincial Hospitals Trust in casualty services, which dates back to 1940, was continued and embodied in the reports of the hospital surveys, published in 1945, including such recommendations as the placing of casualty departments on a proper footing; the appointment of senior men to direct casualty services; the reorganization of such clinics as existed within accident services, and the need for casualty departments to have adjoining short-stay or 'observation' beds.'

In spite of this interest no major policy change occurred until the early 1960s and this change came as a result of pressure from a number of different quarters. In the light of criticisms voiced to them by senior medical and laymen at a seminar in 1957 the N.P.H.T. carried out a nation-wide survey to find out how accurate these criticisms were. Many of the criticisms focussed on poor accommodation, medical staff being too inexperienced, the casualty department's supporting services being inadequate or frequently non-existent, their relationships with other special departments not being close enough and no adequate follow-up of treatment and no links with the rehabilitation services. In 1958 the N.P.H.T. decided to carry out a survey and in 1960 these results were published.

Over the same period other groups were putting forward their proposals. The Briti sh Orthopaedic Association in a memorandum on the Accident Services (1959) argued for urgent action on a grand scale for the accident services. It must be emphasised that the B.O.A. were emphasising the need for 'accident' services rather than a 'casualty' or 'emergency' service (Elston, 1973). A different approach was being developed by Dr. Patterson, Senior

Administrative Medical Officer of the Newcastle Regional Hospital Board, who in 1956, suggested the temporary appointment of senior trained doctors awaiting consultant specialist appointments, wholetime, to supervise these departments. Thus Senior Casualty Officers were introduced and employed as a group of experienced doctors focussing their attention on these departments. These were doctors who could be termed high-grade 'generalists' employed specificially to cope with the variety of complaints presented in casualty.

So on the one hand the B.O.A. were pushing for specialist doctors to work in the area of 'accidents' and on the other hand 'high grade' generalists were being employed to deal with the general area of casualty medicine. Thus there appears to have been two groups with conflicting ideas about the principles on which the service should be based although both were aiming to improve the service. In addition to the Orthopaedic Surgeons' demands for an accident service another group, the traumatologists, were also interested in the development of an 'accident' service. This group consisted of surgeons specialising in treating all types of injury whether it involved orthopaedics or not. This group were independent from the B.O.A. and had specific ideas about how the accident service should develop (London, 1970 and 1978).

The report of the N.P.H.T. came out in 1960 and their main recommendations were as follows:

1. There is a need for a general reorganisation of the casualty services. Medical staffing of such services demands special attention, particularly the provision of adequate consultant cover and the supply, supervision and training of junior staff.

2. Because of the increasing number of accidents the most urgent need is to improve the service for those casualties requiring immediate medical attention and treatment, i.e. 'urgent emergency and accident cases'.

3. Rationalization of present casualty services and organization of services should be based on well-defined catchment areas and should be planned to take account of all the services for medical care already available there.

4. Because of the importance of providing a service for the relatively minor, non-urgent conditions, there is a need for the fullest consultation between the hospitals and local medical committees as to how GPs can help to relieve the hospital of the burden of such cases, and so enable the hospitals to concentrate on what they are best fitted to do.

5. The most important principle proposed for reorganization of the casualty service is that there should be full 24-hour cover by doctors adequately trained for the work they are called upon to do, and who are assured of the stability and importance of this phase of their medical career.

6. Functional requirements of casualty departments should be studied and the results applied to new departments or the adaptation of old.

The above six points are the gist of their recommendations. At the same time as the N.P.H.T. was compiling its report two other committees were also meeting. Unlike the N.P.H.T. study, both these other committees were concerned with accident services and not concerned with the whole of the casualty department. The B.M.A. Accident Service Review Committee had been meeting regularly and its first report in 1960 recommended the introduction of a three-tier structure for services dealing with trauma. A more detailed set of recommendations came from the Standing Medical Advisory Committee who set up a Sub-Committee in 1959 'to consider the organisation of hospital casualty and accident services and to make recommendations regarding their future development'. It is difficult to know how far they communicated with the N.P.H.T. about the results from their study but judging from their recommendations in 1962 little contact could have been made. The following were their more important recommendations (Platt Report).

1. The name 'Casualty Service' should be altered to Accident and Emergency Service.

2. The medical staffing of major accident and emergency units should be increased to allow each unit to have three consultant surgeons each devoting a substantial part of his time to this work, supported by adequate members of intermediate and junior medical staff.

3. The number of accident and emergency units and peripheralunity should be greatly reduced so that each can be adequately staffed at all times. A unit should not normally serve a population of less than 150,000.

4. Many existing units are in quite unsuitable accommodation and much building will be required if even the reduced number of units are to be satisfactory.

5. Accident beds should be provided at the rate of 30 to 35 per 100,000 population and supported by an adequate number of associated geriatric beds.

6. Responsibility for seeing that proper clinical records are used should rest upon the consultant in administrative charge of the unit.

Many of these recommendations were adopted a year later and they formed the basis of a re-organisation of the service. The emphasis in the re-organisation was on centralisation of services. A two-tier system of major accident and emergency centres being attached to district general hospitals and smaller casualty units serving the peripheral areas was proposed. The change of the name was an attempt to deter the casual or in the sub-committee's terms, non-urgent cases who could have gone to their GPs. Much emphasis in the report and subsequent recommendations was placed on the need for skilled hospital treatment to deal with trauma and it is evident that the proposed re-organisation was based on the principle that 'casualty departments' should be turned into centres for dealing mainly with trauma.

This development certainly met the requirements of the B.O.A. who, as was previously mentioned, were almost entirely at that time concerned with developing an accident service. In practice in many hospitals the ortho-paedic surgeon ran the department. The aim of this policy of centraliza-tion was to overcome problems of 24-hour staffing as well as provision of all relevant specialties in one place.

Despite these changes not all the problems were resolved; for instance staff shortages still existed. Members of the profession were questioning whether the recommendations of the Platt Committee to have closer super-vision by consultants and the refinement of the work by a change of name were proving worthwhile. This question was first posed at the Senior

Casualty Officers' Sub-committee of the B.M.A. in 1963 and as a response to this policy that the Casulaty Surgeons' Association (which was formed by the Senior Casualty Officers in 1968) published their memorandum 'An Integrated Emergency Service', July 1973.

The Casualty Surgeons' Association approach

This group argued that the Platt recommendations were all right in theory but in practice they were not working. Under Platt's recommendations there was no room for the Casualty Consultant which was where a number of Senior Casualty Officers had originally envisaged their future lay after their initial commitment to this area. They argued that whilst the ideal of being able to tap a number of specialties in the accident centre was a good one in practice the specialists were usually unavailable and the doctor dealing with the complaint was usually the most inexperienced of the staff able to deal with the case. They advocated the appointment of casualty consultants who would be high grade generalists experienced at dealing with a variety of complaints. In actual fact this position of casualty consultant with its attendant career structure, which incidentally was also proposed by the N.P.H.T. (1960), received approval of the Annual Representative Meeting of the B.M.A. in 1973 and has now been established.

This call for a high grade 'generalist' is according to some members of the C.S.A., not a proposal which is based on abstract ideas about the function of the service but a recognition of the fundamental requirements of the service. They see the casualty service as a community medical emergency service which complements the family consultative service offered by general practitioners. This principle of the casualty service serving the community is, according to the C.S.A., the one on which the refinement of casualty services should be organised. The C.S.A. might argue that their service exists to serve the members of the community when they find themselves in emergency situations or social predicaments.

The basic assumption in this proposition is that laymen and their families should have routine strategies for dealing with matters concerning ing health. They will have their own criteria for evaluating symptoms and deciding to seek professional advice. These criteria will usually not be of a clinical nature but will be related to the activities that the individual and his family carry out in everyday life. It is assumed that even with unpredictable events such as 'accidents' or 'sudden illness' the family or

individual will follow this routine (where possible). It is also assumed that for the majority of individuals and families the general practitioner will act as the professional health care agency in their routines. The C.S.A. might argue that use of the accident centre occurs when these routine strategies for dealing with ill-health are disrupted by special sets of social circumstances or social situations. For example, a tourist spending a short time in an area, becoming ill or injuring himself and requiring immediate medical treatment so as to continue with his activities, will go to the A and E department. The C.S.A. might argue that in this case the individual is in a 'social predicament', he cannot organise the situation so as to follow his routine pattern of health care because his general practitioner is inaccessible. Immediate medical attention is required because the condition is serious enough to disrupt his activities, or the activities of others. Perhaps, in more 'normal' circumstances where the individual may have been able to withdraw from those activities, the requirement to consult medical attention may not have been so urgent. In these special circumstances the opportunity to withdraw from the activities is not so easily available as he was away from home and planned only a limited period of time in the area.

In other examples of the C.S.A.'s circumstances or social predicaments emphasis is laid not so much on the patient's predicament or the priority he puts on the restoration of the flow of routine activities but more on the predicament of the 'other' people involved with the episode. In the case of a road accident the C.S.A. might argue that the police or other 'officials' often use referral to the accident centre as a means of restoring back to normal that aspect of public life which is disrupted and for which they have some responsibility. Thus the assessment of urgency is based less on the perceived clinical severity of the patient(s) condition and subsequent evaluation of the most appropriate hospital care than on the need to get things back to 'normal'. Similar explanations are offered for referral procedures at work, school, in the street or on the sport's field. In such cases the patient's routine strategy for dealing with health and illness is disrupted by the introduction of 'others', usually officials. These 'others' not only bring with them official health knowledge which might have an influence on the decision to seek medical care, they also bring into the situati on another set of priorities which are related to their official position. For example, the first-aid man at work may adopt a policy of referral to the accident centre not only because of the need to restore the

man back to his work activity as quickly as possible but also because of reasons related to litigation. The same may apply to 'episodes' at schools or situations such as childminding.

One of the implications of the C.S.A.'s theory of 'emergency' behaviour is that patients when confronted with 'officials' are passive recipients of instructions and follow the recommended procedure. Yet recent research suggests that patients generally play an active role in negotiations with doctors, and so there is no reason to believe that faced with 'officials' they should be more inhibited. Obviously, the degree of incapacity or shock or confusion suffered will affect the ability of an individual to influence what happens to him although he may be accompanied by a relative or friend who may act as his representative. The degree of negotiating power may be related to the social context in which the episode occurs. For example, injury on a sport's field may involve advice and pressure from the first-aid 'expert' and the other participants. The degree of coercion may be stronger if a similar injury occurs to an employee at work where he is ordered to go to the accident centre and may be taken by a colleague.

Gunawardena and Lee (1977) argue that 'this trend of thought may have been forced upon this section of the medical profession if only because it is virtually impossible for a hospital to turn away patients unexamined'. The assumption being that the patient is too ill to be turned away. However, the C.S.A. might argue that this explanation is too simple. Whilst it is a professional precaution that all patients who attend an accident and emergency department must be examined, patients can be and are referred back to their general practitioners without treatment. Casualty doctors might argue that general practitioners don't wish their patients to be treated by another doctor so casualty doctors will only treat when absolutely necessary. However, the C.S.A. argue that the reason why the majority of patients are treated is that their circumstances are such as to give patients no alternative but to use the Accident and Emergency department.

It must be emphasized that the C.S.A. are concerned with refining the area of work for the casualty department. They have proposed that their legitimate area of work should cover not only those patients who have gone through the more conventional process of consulting their G.P. and been subsequently referred but also those who are in social predicaments and could not contact their G.P. The emphasis is on a more traditional approach

with the G.P. consultative system and the casualty service providing a complementary service rather than a substitution for each other. Evidently the casualty service is seen by the C.S.A. as an emergency service even if emergency is defined in terms of social predicaments and not as an alternative source of primary care.

The C.S.A.'s proposals were set out in a memorandum in 1973 and these ideas were certainly not approved of by all. The British Orthopaedic Association report of 1973 said this:

> 'There is also a danger that independent consultants sharing the view of the Casualty Surgeons' Association, that an emergency is "any patient who finds himself in an emergency situation who is not able to use the normal G.P. services", may increase the misuse of Casualty Dep Departments: by a section of the public as a more convenient alternative to their general practitioner services; by a section of general practitioners, as more convenient open-access consultant clinic for the referral without appointment of non-emergency cases; any by the consultant himself, as consultative, minor operating, and follow-up clinic for non-emergencies in his own field of interest; to the element of the prompt and efficient treatment of the injured, for which he and his staff may no longer find time .... We are concerned, as consultants currently responsible for Accident Services, to record our view that such changes in the control and use of casualty departments would be retrogressive, recreate the very problems which were condemned by the Platt report in 1962, and set back for twenty years progress in the organisation of hospital services for the injured.'

The antagonism of the B.O.A. to the C.S.A.'s approach reflect not only competition between professional groups for scarce resources[1] but also reflects the concern, particularly felt amongst traumatologists, that whilst there may have been an increase in medical knowledge, technology and treatment skills over the past years in the area of trauma it application has been restricted by the slowness with which organisational changes in emergency health care have been made. These changes would have made traumatologists work more efficient and more effective (Scott, 1973).

Certainly, concern is expressed in the Platt report and is still being expressed about the attender with a 'minor' complaint and the apparent waste of hospital manpower and resources involved. In the report of House of Commons' Expenditure Committee (1974) the question of the 'minor' case was raised and recognised as a problem. The report recommended that

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[1] Perhaps one of the more interesting questions which could be posed is why certain medical groups show interest in certain areas at particular points in time, e.g. why did the orthopaedic surgeons dominate this area in the 1950s and 60s.

patients should be educated about 'appropriate' use of accident and emergency departments through the increase in T.V. 'fillers'. The availability of general practitioners was also seen to be one of the important influences on the 'influx' of the minor cases into accident centres. Some of the blame was attributed to inflexible appointment systems, deputising services which deter members of the public using their G.P. as well as patients' ignorance of the temporary residents provision. In addition there were criticisms of G.Ps.' provision for 24-hour cover for their patients even in group practices. One proposal that was recommended to overcome the problem of providing an efficient twenty-four hour service for minor injuries was the building of more health centres which could provide for the ambulant person with a minor complaint. The proposal was given little support in a further document (D.H.S.S, 1975).

Another development which seems to have caused concern within subgroups of the medical profession is the establishment of the position of casualty consultant. Most of the criticism appears to have come from the traumatological rather than the orthopaedic lobby (London, 1978). In this article London suggests that one of the reasons for the establishment of the Casualty consultant post was realization by the Orthopaedic surgeons that the work of the A.E.Ds. 'provided little that could be regarded as being of an orthopaedic nature'. Thus there was recognition by traumatologists and orthopaedic surgeons alike that 'too much emphasis had been placed on more serious conditions, which are a small minority of those seen in casualty departments'. So the establishment of casualty consultants received the support of these two groups. However, Orthopaedic surgeons were concerned that these doctors did not trespass on other areas of inpatient work in the hospital and the traumatologists still proposed that in some circumstances there was a need to develop accident medicine as an independent speciality which should be separated from non-traumatic 'emergencies'. Thus, they argue, that in some larger hospitals the specialty of accident surgery should be developed.

There are two other areas where developments have taken place or issues have been raised which warrant attention. One of these relates to the involvement of general practitioners in the treatment of trauma. No real evidence is available on the proportion of G.Ps. who have the facilities to treat minor trauma such as the stitching of cuts or who actually do treat minor trauma. The availability of facilities may have been increased by the growth in the number of G.Ps. working in health centres

with the attendant increase in the availability of treatment facilities and medically trained staff. In contrast, GPs. are becoming more involved in the treatment of major trauma through the development of a treatment service on site for victims of road accidents. The efficacy of such procedures is still unclear.

The other area involves the position of smaller casualty departments. Whilst there seems to be arguement about the 'medical' and 'economic' necessity of the policy of centralization the need for peripheral casualties, particularly in rural areas and in coastal resorts with seasonal attendance peaks have been endorsed. The staffing of such hospitals produces problems and the provision of casualty services in health centres or G.Ps. working in local community or cottage hospitals have been suggested as alternative solutions. Similar concern to tailor the organization of the service to the needs of the local consumers has been expressed about provision in metropolitan areas. It has been suggested that a completely different type of service should be made available in these areas and this service should incorporate a primary care function.

As is evident from the discussion in the above about the different ways of defining the 'appropriate function' of the Accident and Emergency Department each definition has implications for patient utilisation in that the appropriateness of an attendance is a function of how the work of the accident and emergency department has been defined. It is not surprising therefore that the question of how and why patients utilise accident and emergency departments instead of other sources of medical care has received considerable attention. Concern about patient utilisation is said to be justified when the statistics for the number of new attenders at Accident and Emergency Departments over the past fifteen years are presented (see Table 1). The figures clearly show at both a national and local level a marked increase in rates of attendance for new patients and a decrease in the average number of attendances per patient. The latter trend suggested to some extent that the increase in cases is due to an increase in non-urgent cases. Whilst these issues will be examined in more depth in the following chapter it is necessary to outline briefly the various explanations of patient utilisation of accident and emergency departments which have been offered and which also represent three distinctly different approaches to patient behaviour in this area.

Explanations of utilisation behaviour implicit in the policy proposals

Firstly, the most popular approach has been the one presented previously and closely associated with the idea of the Accident and Emergency Department as a centre for dealing with injury and serious illness. The explanation for the growth in demand for accident and emergency departments is said to lie mainly in the changing organisational arrangements in the delivery of family practitioner services. These changes have led to G.Ps. becoming more inaccessible to their patients and thus patients turn to A and E departments as an alternative source of medical care even for complaints which could be clinically defined as 'minor'. The image of the patient then implicit in this approach is one who passively responds to the prevailing organisational arrangements.

Coupled with this explanation of the growth in demand is the argument that there has been a real increase in the incidence of traumatic conditions which also supports the view that accident and emergency departments should predominatly focus on trauma. The evidence to show that there has been a real increase in the accident rate is difficult to find[1]. However, the idea that the increase in the incidence of trauma is simply liked with utilisation rates once again reflects the images of patient behaviour implicit in this approach.

The second approach is that found in the C.S.A.'s proposal. The C.S.A. might argue that the growth in demand for accident and emergency departments reflects the increasing complexity of the population's social activities including the increase in geographical mobility. The population as a whole is exposing itself more and more to the social predicaments defined by the C.S.A. as emergency situations. Therefore following the C.S.A.'s proposal the reasons for the growth in demand for the service lie mainly with the population's increasing propensity to find itself in social predicaments which might lead to the use of the accident and emergency department. Incorporated in this approach is a 'social' element and there is a suggestion that there is an attempt to examine patients' behaviour within a social context. However, the use of the term 'social' is misleading as it merely extends the explanations presented in the first approach. In that approach the emphasis was on the

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[1] There has been talk in recent years about the accident rate reaching epidemic proportions. However, this proposition is difficult to substantiate given the nature of the statistics used and the findings of a recent report showing that there has been a lowering of the threshold for consultation for the majority of complaints (R.C.G.P., 1976).

organisational constraints on the patient in his choice of an appropriate system of medical care whilst in this second approach the organisational constraints are replaced by social circumstantial barriers. The image of the patient as passive without any critical abilities or abilities to make choices is common to both, also is the assumption that the patient will and ought to go to his general practitioner in 'normal' circumstances. Thus in both approaches there appears to be a moral prescription on the patient to behave in a manner which fits in with the different definitions of the appropriate work of an Accident and Emergency Department.

The third approach is one which takes the position of the layman or 'consumer' more seriously. It argues that the reason for the growth in demand on accident and emergency departments is due to a change in consumer expectations and preferences for medical care. The arguments vary but one possible argument is that the population has become more hospital-oriented in that it puts a higher value on efficient, technological and more impersonal medicine which is more likely to be found in the hospital setting than in the apparently more personal 'setting' of the G.P. surgery. (See Cartwright and Anderson, 1979). It could also be argued that patients have become more critical and have developed specific ideas about the appropriate place for treatment of certain conditions. Thus they may argue that trauma should go to the hospital and illness to the doctor. Whilst these arguments are speculative they do illustrate this third approach which emphasises the ability of patients to make positive choices about appropriate settings for medical care rather than be seen as negative reactions to organisational or socio-environmental constraints. Certainly, evidence is available to show that this growth in demand for emergency services in hospitals is occurring in other countries with different health care systems (Davidson, 1978).

Further discussion of these different approaches will take place when the literature is reviewed in the following chapter. However, in this next section a brief account of the history of the development of the casualty department is presented in an attempt to make sense of some of the ideas that have already been outlined about the organisation of the Accident and Emergency Services. As this study will be examining the C.S.A.'s proposals in depth this section will concentrate specially on the roots on which the C.S.A.'s ideas are founded.

2. The history of the development of the casualty services*

The Roots of the C.S.A.'s proposals

The C.S.A. argue that the function of the casualty department should be to cope predominantly with members of the community who find themselves in circumstances which could be defined as social predicaments. This idea although apparently novel in the present day debate has many parallels throughout history. The evidence presented here is restricted to the 19th century period and after.

'It was not until the middle of the 19th century that hospitalisation was believed to confer any particular benefit on the course of disease. Before that time medicine and surgery were carried out in the home. People were admitted to hospital when they were sick and had no home or no caring relatives. The hospital was therefore set up initially to cope with what was seen at that time as the social problem of the deprived sick. Admission to hospital was possible through two different channels. For more predictable illnesses admission was achieved by letter from a governor of the hospital and in these cases the local church'warden acted as the liaison between the poor and the hospital governors. However, it was recognised that sickness and dependency were no respecters of regimentation and a second method of admission for chance and unpredictable events was required and this was provided by the hospital beadles who, in co-operation with the constables, were required to tour their ward daily and bring in the sick and injured to hospital - able-bodied vagabonds, loiterers and other miscreants to Bridewell (House of Correction). Thus a system existed for coping with unpredictable events and representatives of the community were involved in the referral of patients.

Scheduled patients were received in the Boardrooms of Royal Hospitals and this idea was adopted by voluntary hospitals in other parts of the country. Referral passed from the hands of the churchwardens or Poor Law Receiving officers to the general practitioners and this change was complete by about 1880. The sanctioning of admission passed from the hands of the governors to the consultants and was also completed by about this time. There is thus a direct evolution of the control of the scheduled use of the hospital facilities from the 16th Century Receiving Room to the present day outpatient department. The Receiving Room was also being used for

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* For a more detailed account see E. Abson (1979) - The History of the Casualty Department. (forthcoming)

the unscheduled admissions although the simple division and subsequent separation of these two basic functions of the receiving room became complicated and confused by the continued failure of poor relief or (state) medicine to provide for the destitute.

One response to the problem of the destitute, in particular the disabled, was the setting up of outdoor dispensaries or G.P. surgeries in hospitals. Thus the receiving room consisted of three different categories of patient; outpatients, casualties and dispensary patients. However, as more and more voluntary hospitals appeared and allowed their receiving rooms to be used as dispensaries, practitioners found themselves deprived of patients as even their less deprived patients were flocking to the hospitals for free treatment. Disputes between the specialist consultants and the practitioner arose which culminated in the 1880s, in the formation of the General Practitioners' Association. Abuse of the hospital outpatient departments became the topic of editorials in the 'Times' and the 'Lancet' and the outcome of this dispute was a code of conduct within the profession which 'gave the patient to the practitioner and the hospital to the specialist'. Specialists would only see patients in hospital and in private practice on referral by practitioners. Practitioners too did not treat another practitioner's patient unless there were extenuating circumstances. This became the essential ethic of the profession and it established the G.P. consultative service.

The dispensary function of the receiving room was no longer required and there was referral to hospital by doctor's letter only except for those just and proper cause cases. By about the 1930s the receiving room became separated into two distinct buildings, the Outpatient department and the Casualty department. The latter coping with patients who did not approach their G.Ps because of extenuating circumstances. This in essence, is the basis on which the C.S.A. propose that the Casualty Department should operate.' E. Abson (1979)

Judging from the historical evidence presented here, it is evident that the C.S.A.'s proposals are well-founded in the history of the development of the casualty department within the hospital. It is evident that their emphasis on a social or circumstantial definition of emergency or casualty work has close parallels with the ways that hospitals were used in other periods.

3. Purpose of the proposed investigation

Against this background, the basic purpose of this study will be to identify the actual functions of the Accident and Emergency department in relation to the community. The identification of actual functions is seen as a first essential step towards a decision, in both a national and local context, about the functions which A and E departments should be performing. This study will focus on the Accident and Emergency department of one particular hospital - the Kent and Canterbury hospital. There were two reasons for selecting a limited area for this part of the study. First, this hospital functions as the major accident centre for a large and predominantly rural catchment area, with extensive coastline and large number of visitors during the summer months. The location therefore differs from the heavily urbanised setting (see Figure 1.1) in which most comparable studies of Accident and Emergency departments have been conducted, and the results should be of comparative value in developing a general understanding of accident and emergency behaviour. Second, there already exists in Canterbury a stock of interest and resources which can be better used in intensive local studies than in more superficial studies across a wider area.

Specifically, the intention of this part of the project is to provide one part of the information needed to test the proposition explicit in the C.S.A.'s proposals about the redefinition of emergency work. Thus the main focus of the study will be on how and why patients utilise the department.

4. The characteristics of the catchment population of the Accident and Emergency Department

The department at the Kent and Canterbury serves as the Accident Centre for the East Kent area. Given the rural character of the environment and the extensive coastline with its attractions for holiday-makers, a number of peripheral casualty departments are also present. Figure 1.1 shows the location of these peripheral casualty departments and their times of opening. As the figure shows all these departments are open during the daytime only apart from Margate which is open from 8 a.m. - 12 p.m. In addition to these there are a number of Cottage Hospitals who provide a 24 hour service staffed by nurses with general

practitioners on call. These cottage hospitals do not have X-ray facilities but the casualty departments, which are staffed by casualty officers, do. Thus for a 24 hour period all the major cases will be referred to the Kent and Canterbury Accident Centre. In addition, it serves as the casualty service for the Canterbury area on a 24 hour basis as well as being the only casualty service available for most of the area during the evening hours and the only casualty service available between the hours of 12 p.m. and 8 a.m. It is evident that the catchment area of the Kent and Canterbury accident and emergency department varies by time of day.

In addition to the emergency service provided by the hospitals G.P.s are required to provide a 24 hour emergency service for all their patients. No data are available at present on the use or effectiveness of these services. Also, no data are available at present on how many G.P.s treat minor trauma such as stitching of cuts or the provision of facilities in general practitioner surgeries for dealing with such conditions. Health Centres are situated in Dover and Whitstable.

Other studies have suggested that the structure of G.P. services in the area has implications for the use of an accident and emergency department. For instance, in the Newcastle study (see Table 2.1) the results from their statistical analysis show that presence of appointments systems and deputising services showed no demonstrable relationship with patients decisions although G.P. partnership size did. Patients with single-handed practitioners tend to present to the A.E.D. Available data for East Kent (Mitchellhill 1976) shows that, 'as in England as a whole, about 40% of general practitioners are single handed'. The overall average G.P. list size for East Kent was very similar to that for England as a whole.

Variations in morbidity, mortality and in consultation rates have been found to be related to socio-climographic characteristics of the population. Available data (Mitchelhill 1970) show that compared with England and Wales the proportion of persons of retirement age is considerably greater, and of younger age groups smaller, than in England and Wales as a whole. These differences may have important implications for the interpretation of the results from this study as the accident and emergency hospital service has been recently terms 'the young males health service' (Wilson, 1979). The social class structure in East Kent

as a whole is similar to that in England and Wales. Mitchellhill also argues that whilst the area had lost its attraction as a holiday resort it is still seen as an appropriate place for retirement. She says, 'In the coastal areas of Hythe, Herne Bay, Margate and Broadstairs, over one-quarter of the patients are over 65 years of age. Even though the numbers of holidaymakers specifically staying in the area may have decreased there had been a considerable increase in the amount of traffic going through the area to the ports for the Continent'.

Figure 1.1 Locations of hospital facilities for accident and emergency services in East Kent with times of opening

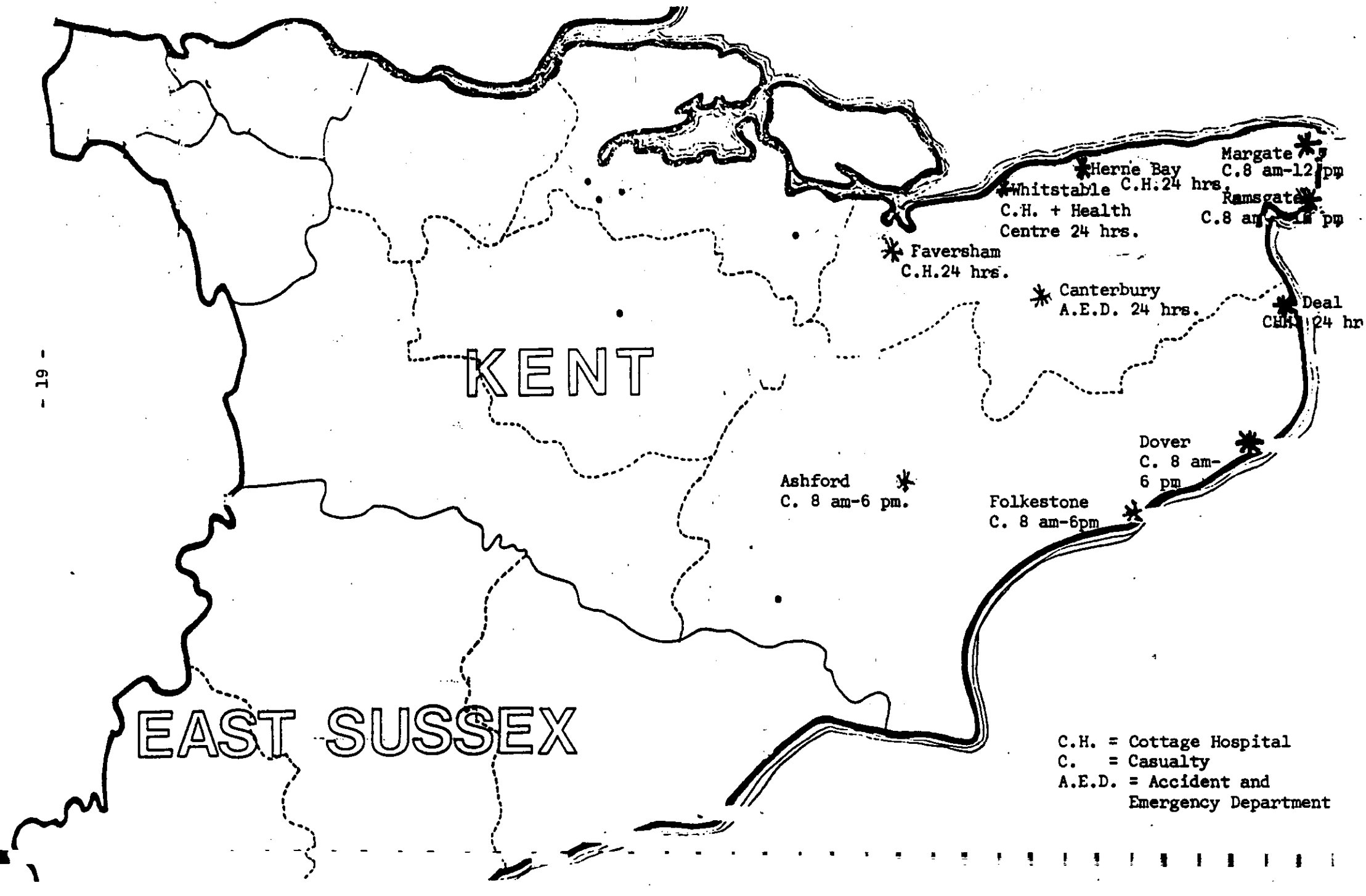

Table 1.1 Numbers of new patients attending Accident and Emergency departments in the U.K. and at the Kent and Canterbury Hospital

Year	U.K.		Year	Kent and Canterbury	
	No. n.p. in thousand	Average attendance per patient		No. n.p.	Average attendance per patient
1966	7909	1.9	1969	17534	1.5
1971	9358	1.6	1972	21057	1.4
1974	9870	1.6	1973	21401	1.4
1975	9989	1.5	1974	26763	1.1
1976	10463	1.6	1975	28450	1.1
1977	10658	1.5	1976	30389	1.2
			1977	31106	1.2
			1978	32544	1.2

Chapter 2

Review of the literature

In the light of these preliminary objectives the published literature on use of accident and emergency centres is examined. The main aim of this exercise is to see if similar research has been carried out before and if so how the 'problem' is approached and what the substance of the findings are.

There are two different bodies of literature which are of relevance to this area of study. Firstly, there is the work that has been carried out on utilisation of accident and emergency services and in particular examining the influences on patients' choice of medical care system. A considerable amount of work has been carried out on this topic particularly in North America. Secondly, and more indirectly, there is the work that has been carried out in the more general area of illness and utilisation behaviour. Much of this work could be loosely termed 'sociological' and it is of value not only because it brings novel ideas and concepts to the field of utilisation of accident and emergency services but because it brings a theoretical understanding of the various approaches that have been proposed.

Much of the research in Great Britain has focused on the issue of 'appropriate' patient usage of the accident and emergency service. Much of the work has been of the 'service' kind and it can be divided into two different approaches. Firstly, there are the 'service' studies that use a sample of attenders at an accident centre and describe their characteristics. In many of these studies the primary purpose has been to identify the proportion of 'inappropriate' attenders. Some studies have attempted to classify patients according to their reasons for using the accident centres. These classifications are usually simple and make distinctions between 'medical' and 'social' attenders. The second type of study has offered a more analytical approach to patient use of accident centres. Sampling from both accident centres and general practitioners, some of these studies have concentrated on examining factors related to patients' choice of treatment. Other studies have attempted to develop conceptual frame-works of patient use of health

care systems and have assessed the extent to which A and E departments constitute part of the patient's routine pattern of health care.

1. The characteristics of attenders of Accident and Emergency Departments

(i) demographic characteristics

The available evidence suggests that the heaviest demand for accident services comes from school children and young adults and there is a larger proportion of young males than females (N.P.H.T. 1960 Morgan et al 1974).

The relationship between social class and use of emergency services has been much less extensively explored in this country than in the United States (Lavenhar et al 1968). This may be due to the importance of financial barriers to health care in the United States but it may also be due to the failure of studies in this country to identify the background population in the catchment area of the hospital under study, this frustrating a comparison of the social class distribution of the attenders with the social class distribution of the population from which they came. However, in the Newcastle Accident Survey such a comparison is possible and no social class differences were found. (Morgan et al 1974).

(ii) the range and severity of clinical conditions

Several studies have described the clinical distribution of the case load of an accident department but perhaps the most comprehensive study was carried out by the N.P.H.T. (1960). Using data collected from a cross section of eighteen accident and emergency departments (then called casualty) in a variety of geographical locations, samples were taken of 200 cases running concurrently from each of the departments for the same period of the year. The largest proportion of the case load were patients suffering from trauma of some kind, mainly soft-tissue damage or skeletal injury. In general, medical and surgical work was small. A more intensive analysis of the clinical nature of the case load of eight hospitals was made. Fractures composed 13% on average of the case load and wounds of all severities 22% on average. Burns composed 5% on average.

This study was carried our before 1960 and there may have been changes in the clinical case mix of attenders since that time. Such changes

might be expected because of changes in both the organisational structure of the accident and emergency services (Central Health Services Council, 1969) and the general practitioner services (Bevan and Draper, 1967). No study has been discovered in which one hospital has been studied at more than one point of time, and comparison of findings from different studies based on different hospitals for this purpose lead to major problems of interpretation because of the lack of uniformity in definition, the large variations in the composition of the catchment areas between hospitals, differences in sampling procedures and differences in the time of the year when data were collected.

The nature of the case mix at accident and emergency departments appears to be a function of its geographical and social-environmental location. For example, in a survey of accident departments in London it was concluded that 'on average non-traumatic conditions accounted for about 40% of the total case load but there was an obvious increase in the non-traumatic element of the case load as one neared the centre of London' (Fairley and Hewett 1969). A similar difference in the case mix between central urban city emergency centres and suburban emergency centres has also been shown in studies carried out in the United States (Torrens and Yedvab 1970). These variations in the U.S. reflect, according to these researchers, the different functions of the hospitals. They argue that one of the functions of the emergency clinic in large city hospitals is to act as family physician for the urban poor, generally a high proportion of non-traumatic conditions in the case load. In contrast, the emergency clinic situated in a peripheral area of the city with a larger proportion of traumatic cases has the more conventional function of providing acute emergency care for the community and also fulfilling the role of a substitute for a private physician and the outpatient department during the off-peak hours when services are not available or not appropriate to the patient's problem. Comparable studies have yet to be carried out in this country. However, speculative explanations have been made particularly in relation to the variation in case mix between accident departments in London and those in the provinces. Lack of availability of general practitioners and the large number of commuters have both been cited as explanations (Caro 1972). More recent studies (Wilkinson et al 1977) have shown about a fifth of attenders have no G.P. and that the hospital is being used as a General Practitioner service for some groups.

The question of assessing the severity of clinical conditions in the case load also poses problems of definition. Should severity be assessed in terms of clinical criteria such as signs or symptoms, duration or type of treatment or level of skill needed for treatment or should it be assessed socially such as in the degree of disruption in the patient's and his family's everyday activities? Many studies use clinical criteria and these are usually closely associated with what the authors consider to be the appropriate function of the accident and emergency department. Thus Crombie (1959) devised a scale of severity of condition which was later adapted for use in the N.P.H.T. study. The scale used as its criteria for assessment both the level of skill needed and the facilities available to treat the condition. Crombie divided conditions into three different groups. Firstly, patients with conditions which could have been treated by a nurse without reference to a general practitioner. Secondly, patients who could have been treated by the writer in his own general practice, and thirdly patients who should be treated in hospital because the condition was more serious than in the above. Eighty per cent of the 410 casualty department attenders could have been treated by a general practitioner or a nurse. In the N.P.H.T. study, using the same scale, 71% need not have been treated at hospital. This percentage is based on an average from a sample of 1,963 attenders at all the hospitals surveyed.

For many other authors the 'minor' cases which were defined in clinical terms were also imputed to be 'unnecessary' attenders. Blackwell (1962) suggested that 35% of 200 attenders at an accident centre situated in London should have been treated elsewhere and Evans and Wakeford (1964) in a study in Cardiff found the figure to be 70%. A large-scale study carried out throughout the Wessex region (Wessex R.H.B. 1973) found that 65%-71% of the attenders at the major accident centres were 'minor' cases and could have been treated by community health services. The figure for accident units situated in peripheral areas varied between 76% and 89%. In a study of 2,379 attendances at an accident centre in Derby (O'Flanagan 1976) 68% were assessed as being 'minot' casualties which could have been appropriately managed by general practitioners.

In other studies, necessity of attendance has been defined in terms of clinical urgency, in a study of 3,283 new attendances at an accident unit in London (Gampel 1965) defined 50% as 'non emergency'. Others have defined 'appropriateness of attendance' in terms of particular types of

events or types of condition. Thus Griffiths et al. (1967) found 28% of their sample to be 'inappropriate' because they were not in the categories of accidents, medical emergencies and surgical emergencies. The N.P.H.T. study defined wrong attenders as those patients without a letter from their general practitioner and with a non-traumatic condition which did not require urgent treatment.

It is noticeable that in the majority of these studies that the assessment of clinical seriousness is usually made by the research worker after final dignosis and after a number of tests have been carried out which may confirm or refute the initial diagnosis. Thus these assessments not only fail to take into account the patient's judgement of seriousness at the time of the 'episode' but also ignore the medical staff's initial suspicions of severity. This distinction between initial and final diagnosis is important as it might be argued that since even in the 'minor' cases the medical staff need to carry out tests to be certain of 'what is wrong', the layman cannot reasonably be expected to make such judgements. However, in the United States one study was carried out which examined the proportion of the case load at five hospital emergency clinics which were defined as 'urgent' cases (Roth 1972). Urgency was classified according to whether the staff gave some cases precedence over all waiting patients. When the staff reaction was not clear the case was classified as 'borderline'. Of the five hospitals, at most 8% were classified as urgent and 10% as borderline but for each hospital combination of urgent and borderline cases never reached more than 13%.

(iii) Source of referral

Another type of classification of patients that has been used to define 'appropriate' attendance at an accident department is 'source of referral'. Although some writers have suggested that a large proportion of the group of patients referred to an accident and emergency department by their general practitioners has been wrongly referred (Fry 1960), much more concern has been expressed about the self-referral, i.e. the patient who arrives at an accident unit on his own volition. This concern about the legitimacy of the 'self-referral' appears to derive from the assumption that laymen are incapable of making an accurate diagnosis of their conditions and therefore would need professional advice for directions to the appropriate medical care agency. This directive should come from the general practitioner.

Another explanation for the concern about self-referrals which is closely associated with the first hinges on the attempts of clinicians to improve the professional status of casualty medicine in relation to other medical specialisms. In the latter the general practitioner acts as a screening agency and channels the flow of patients accordingly. Some casualty doctors are concerned that similar procedures should operate with their patients to ensure that they spend the majority of their work coping with real 'emergencies' and which also serve to protect and maintain professional autonomy.

The two most relevant questions in this debate are first, whether there is any evidence to suggest that the proportion of self-referrals is increasing, particularly in the light of the evidence of a large increase in the numbers of new patients attending accident centres over the last decade, and secondly, whether self-referrals are more likely to be assessed as clinically 'trivial' cases than professional referrals. There is some indication that that proportion of self-referrals is increasing. For example, in the N.P.H.T. study and Fry's study which were both carried out at approximately the same time, the figures were 66% and 63% respectively. In a study carried out in London five years later the figure was 78% and a similar proportion was found in the Newcastle study carried out in the early seventies. Once again the lack of uniformity in definition brings into question the validity of such an interpretation. However, Cartwright and Anderson's recent study comparing patient views to general practitioners showed that they would be more likely to go straight to a hospital than to a G.P. for a cut that needed stitching had increased from 59% in 1964 to 76% in 1977 (1979). In addition to the problems of comparing findings from accident centres situated in different locations, there appears to be little consensus over definitions of the source of referral. For example, in the N.P.H.T. a referral from a G.P. had to include a letter. Fry did not distinguish between those who came with or without a letter in his calssification of G.P. referral and in the Newcastle study a distinction was made between those patients who actually consulted their general practitioners and were examined before referral with those who spoke over the telephone to the G.P. and were then referred, and those who could only contact their G.P's receptionist and were advised to go to hospital. The last category was defined as a self-referral and the first two were G.P. referrals.

Few studies have examined the relationship between clinical conditions severity and source of referral. Crombie, using his scale of clinical expertise, found a much higher proportion of trivial cases amongst the 'self-referrals' compared with the other groups. He also distinguished between patients attending on their own volition from those patients who received 'non-medical advice' as a cause for attendance. There was little difference in the ratio of trivial to serious cases between these two groups.

In the initial proposals for this study it was suggested that valuable comparative data on aspects of accident and emergency behaviour could be collected through examination of the characteristics of attenders at the Accident and Emergency Centre of the Kent and Cantebrury Hospital. However, as this review has shown, the types of characteristics identified in the majority of studies are simple epidemiological variables which give a limited insight into patterns of accident and emergency behaviour. With the exception of the Newcastle Accident survey which will be discussed in greater depth in the next section, little useful data are available for purposes of comparison. Certainly, data are not available on the circumstances in which decisions are made to contact the emergency services.

Once again, with the exception of the Newcastle accident survey, data on other aspects of the functions of the accident department in the community are limited. Data on such aspects as patient satisfaction are almost non-existent.

2. The analytic approach

In this section, whilst the more general features of patient utilisation of emergency services will be considered, the primary objective is to see how far the published evidence tests the C.S.A.'s proposition that the emergencies with which A and E departments deal are defined in terms of circumstances in which incapacity from injury or illness occurs and do not imply that the diagnosis is necessarily one requiring immediate intensive therapy.

The ideal method of testing the C.S.A.'s proposition would involve taking a large random sample of individuals and their families and carrying out a prospective study, continually monitoring and observing their patterns of 'illness' behaviour. Thus it would be possible to compare the circumstances under which choices are made about using the accident

centre, consulting a G.P., taking other action or doing nothing. However, such a task would be lengthy and expensive and may pose considerable data collection problems in that many of the events under study are unpredictable.

Researchers concerned with a similar problem have opted for the more pragmatic approach in that they have compared a group of patients who initially went to a general practitioner with those who went direct to the accident centre. The difficulty with such comparisons is in defining the range of conditions to be included. Firstly, there is a lack of consensus about what is considered to be 'appropriate' work for the general practitioner and the accident centre. Secondly, if only a limited range of conditions is included then this may create an implicit bias in the model, in that clinical condition or the way symptoms or signs are evaluated by laymen may in fact be the crucial discriminator in terms of the choice of care.

In a study carried out in Bristol, Dixon (1971) examined the number of attendances for 'minor' conditions at a hospital accident centre with those at a health centre over a six-month period. The health centre was situated within the catchment area of the accident centre and this catchment population is defined as 11,417. Dixon excluded all those attenders who were referred to the accident centre by any person with medical or nursing qualifications as well as all those who arrived at the hospital in an ambulance. Also excluded were those with conditions which could probably not have been managed at the health centre, in that they had a radiological examination performed or a plaster case applied, or were admitted to hospital or referred to the outpatient department or to some other person or place apart from the health centre or family doctor. Dixon was, therefore, concerned to exclude all conditions which were not potentially treatable by a nurse or doctor in a health centre.

In the study period, 1,487 patients attended the health centre and of these 1,430 were managed entirely by the medical staff there. In comparison, 826 attended for minor conditions at the accident centre during the same period. In comparing the characteristics of the two groups Dixon found 'attendances at the accident department reached a peak during the early evening, and included relatively more males, more adults, more patients with injuries than with symptoms,and more residents from the area immediately adjoining the hospital.' The implication of these findings is that patients preferred to take trauma to an accident centre rather than to a health centre. Whether such a result would still hold after the other significant variables are allowed for is not clear.

Such an analysis was carried out in a study in Newcastle which compared the characteristics of patients attending three different accident centres with those attending the corresponding general practice for minor trauma only, (Russell and Holohan 1974). All patients came from the same catchment area and all patients were suffering from minor trauma as defined by the I.C.D. system. Their sample attenders at the A and E departments excluded all patients who were (i) brought in dead, (ii) patients transferred from other hospitals, (iii) patients who were immediately admitted to an in-patient bed, and (iv) road traffic accidents. The data were collected in two parts and there was a two-year period in between the collection of data at the accident centres and that collected from the general practitioners. However, the data were collected in both locations during the same three months of the year. The findings showed that of 346 patients with minor trauma 155 went straight to the A.E.D. compared with 191 who went to their general practitioner as a first reaction to injury. This evidence clearly suggests that general practitioners still deal with a substantial proportion of minor trauma, although there is evidence that this is decreasing (R.C.G.P. 1976).

This study also provided important evidence with which a number of the speculative explanations for the increasing number of attenders at an accident centre could be evaluated. The more popular explanations are as follows:

(i) the increasing use of appointment systems by general practitioners
(ii) the increasing use of deputising services by general practitioners
(iii) the declining frequency of house calls and the demand for regular working hours by the general practitioners
(iv) population mobility and the resulting lack of a family doctor
(v) convenience motives of both the patient and the physician
(vi) changing public attitudes about outpatient facilities
(vii) the declining willingness of general practitioners to deal with trauma.

Thus, these explanations either emphasise the importance of the changing structure of the organisation of the general practitioner service or the changing wishes of the patient. The two are clearly interrelated.

The research team in the Newcastle study explored these propositions by analysing the two data sets jointly through a multi-discriminate technique, the dependent or outcome variable being the choice of treatment. The purpose of the analysis was to identify the best predictor of the outcome.

Table 2.1 shows the results of the multi-discriminant analysis. In the 'best discriminator' section the five epidemiological variables are ranked in order of their ability to discriminate. Age and final diagnosis are equally ranked. The five non-epidemiological variables are those ranked sixth to tenth in their ability to discriminate. 'Care system preferred for cut, expected hospital action for cut', and 'expected G.P. action' are ranked equally.

With respect to the explanations outlined previously about the increase in attendances at the accident centre, this analysis shows that the presence or absence of an appointment system and the use of deputising services are of little importance in their ability to predict outcome. The analysis used both the perceived presence and the actual presence of these organisational practices and similar results were found. The lack of an association between presence of deputising services and changes in the pattern of the use of accident centres is shown in other studies (Williams et al. 1973).

Time of day and day of week of accident are also shown to have little to no discriminatory power. This may have some indirect significance for the proposition that there is a relationship between the increasing use of accident centres and the hours of opening of general practitioners' surgeries.

The problem with these data, as with many statistical models, is one of translating the findings into a model of decision-making in illness and accident situations. No coherent theory of decision-making was articulated (not that the authors set out to find one) so it is difficult to make sense of how the variables of differing epistemological statuses relate to each other. For instance, although distance from hospital and distance from general practitioner are the best predictors of choice of treatment, it is still not apparent how this 'objective' distance manifests itself in the decision-making process, i.e. how the objective distance relate to perceived distance. The crucial question is what 'objective distance' means to the actors involved in the decision-making process. It is difficult to see how final diagnosis can be a predictor variable. It should possibly be replaced by 'presenting signs and symptoms when the 'episode' happened'. The requirement then, if practically possible, is to replace the variables used in the study with the underlying concepts which they represent and thus it should become clear as to the model of decision-making implicit in the work.

With regard to the C.S.A.'s hypothesis, the evidence derived from the Newcastle analysis is inconclusive. Circumstantial variables such as 'site of decision' and 'person who gave the advice' although included amongst best predictors are ranked only sixth and seventh respectively. It could be argued that 'distance from G.P.' or 'from hospital' is a circumstantial variable in that the individual is in a social predicament when his G.P. is inaccessible, e.g. the tourist. However, there are the problems involved in the translation of the epidemiological variable 'distance' to its meaning for the decision-makers. Perhaps of more crucial significance for the C.S.A.'s proposition is the presence of final diagnosis in the best five predictors, i.e. wounds or fractures are more likely to be taken to an accident centre. Irrespective of whether it is the final diagnosis or the presenting symptoms, the implication of this finding is that for some complaints, even within the small range of conditions included under the heading of minor trauma, laymen make distinctions about the choice of care. Whether this is due to an assessment of severity or an assessment of the availability of appropriate facilities is unclear.

If the latter explanation is correct, then it can be argued that the C.S.A.'s proposition should not stand. However, the following point may question such an interpretation. There appears to be a bias built into the findings related to the final diagnosis. For example, the hospital has more accurate facilities for diagnosing fractures than have general practitioners and therefore it could be argued that there is a greater likelihood of having a fracture diagnosed at hospital. Hence the finding that fractures are more likely to go to hospital may be a function of the ability to detect fractures. This argument would be invalid if general practitioners referred to hospital those patients with signs and symptoms which are exactly the same as those on which X-rays are carried out in hospital, for there would then be just as much chance of fractures being detected for both sets of patients. However, if the general practitioner uses a screening process which differs from that used in hospital then there is the liklihood of bias in the findings particularly as only new patients and reattenders were included for analysis.

In summary, whilst the Newcastle Accident survey has provided important directives for further research in this area it does not provide clear enough evidence to make any strong judgements about the significance of the C.S.A.'s proposition.

A number of other studies that have examined the use of accident and emergency with an emphasis on the position of the patient. In Canada a study compared the patterns of local and tourist use of an emergency department. The tourist group was used as a control group in that it 'is doctor-deficient and lacks knowledge of the local medical network' (Krass 1976). On the other hand, 85% of the local group were able to identify a family physician. Perhaps the most interesting finding was that the pattern of illness taken to the emergency clinic by the tourist group was strikingly similar to that of the local population. The author concludes from this that public attitudes, rather than availability of health professionals, determine the pattern of illness observed in an emergency department. This evidence also has implications for the C.S.A.'s proposition in that if the proposition holds, then it might be expected that the tourists would bring to the emergency clinic a range of ailments which would be different from those brought by local residents. However, the C.S.A.'s proposition is not refuted by these results because it is unclear as to the circumstances under which the local residents use the emergency clinic.

Much interest and concern has been expressed in the United States about the growth in demand for emergency clinics. This attention is reflected in the plethora of studies that have been carried out on the subject in recent years. Whilst it is impossible to review all of them here the various perspectives will be outlined particularly as some of them bear some relevance to the C.S.A.'s proposition.

It is possible to divide the studies that have been carried out in the U.S. into two groups in terms of the nature of the explanations that are used to account for patients' use of the emergency clinic. In the first group are those studies that argue that patients use the emergency clinic because alternative or other sources of care are unavailable or inaccessible. Therefore, given the constraints on their choice, patients have no alternative but to go to the emergency centre. In the second group emphasis is put, not so much on problems of unavailability or inaccessibility but on understanding the influences on patients' choice of medical care system in the sense that patients have ideas about suitable or appropriate sites for medical care for certain conditions and these should be taken into account just as much as the organisational aspects of the delivery of medical care. Whilst both types of explanation are useful, it is the second approach that will be concentrated on here as in these studies an attempt has been made to move away from the approach which merely explains patient

action in terms of how the medical care system should operate. In this second approach the meaning of patients' action is taken seriously and attempts are made to make sense of it in the patient's own terms.

The second group of studies take two different forms. On the one hand there are those which have explained patient use of the emergency clinic in terms of the socio-demographic characteristics of the users. Such factors as social class, age, income, ethnicity and usual medical care patterns have all been postulated as being of relevance. (See Alpert et al 1969, Lavenhar, M.S. et al 1968 and Weinemann, E.R. et al 1966). Much of this evidence is contradictory and inconsistent and the reason for this according to some authors is to be found in their methological deficiences. "For example, most E.R. studies attempt only to document E.R. utilization, that is, they seek to describe in detail the characteristics of the Subject E.R. and its patient population. Few of these studies of E.R. Utilization incorporate their data into any sort of theoretical construct of the utilization process. In the absence of a theory of patient demand for health care services, basic hypothetical relationships between patient wants and actual utilization can neither be formulated nor tested. As a consequence, because little of the literature addresses either the subject of patient demand for Emergency Room care or the process by which care is received, we know little of patient motivation in choosing one emergency department over another or an emergency department over an alternative ambulatory care site, or why a particular set of patients over-responds or under-responds to a given symptom, or how and why at what stage a patient decides to call an ambulance". (Stratmann and Ullman 1975).

This call for the development of a more coherent framework for patient demand for emergency room facilities leads on the second type of approach where authors have attempted to do exactly that. It must be emphasised at this point that in the United States as in the U.K. the justification for the need for this research is based not only on the growth in demand for emergency rooms but also on a belief that there is increasing use of these facilities for 'non-urgent' conditions. One group of authors who have attempted to develop a more coherent framework of patient demand are Solon and Rigg (C1972). They argue that the network of medical care requires more explanation than identifying the individual's usual source and enumerating other sources that the patient uses. A conceptual organisation of the sources the patient uses must be made to be more

reflective of how they are used and how they inter-relate. The role of the hospital unit can best be depicted, both for the individual and cumulatively for the population - within a framework that encompasses the totality of sources used and somehow represents them in the respective roles they occupy in the individual's "total pattern of care".

In their study, Solon and Rigg interviewed a complete one-week sample of patients attending either an emergency unit situated in an inner-city setting with a substantial lower-class population, or an emergency unit in a suburban middle-class milieu. They concentrated on examining their data in terms of four concepts related to the individual's overall pattern of medical care. These concepts were central source of care, volume source, configuration of care, and cohesiveness. They were concerned in answering the following question. "Are these socio-cultural and economic differences of the two hospital's emergency patients accompanied by differences in their patterns of securing medical care?"

The actual source of care is defined as the patient's central source of care. This is not necessarily the source of care that the patient uses most frequently but the facility or doctor which is most important to him in the sense of his having the greatest continuing trust or reliance. As Solon and Rigg put it, it is the patient's medical 'homebase'. Private physicians were found to be predominantly the central source for both patient populations although 85% had this pattern among Suburban Hospitals' emergency attenders compared with 59% at the Inner-City Hospital. There was a difference between the hospital patient populations in the way their central source of care was used when the central source of care was a physician. "Suburban Hospitals' emergency patients whose central source was a private physician used him almost universally as a general medical resource, getting their specialty care from other more speciallized providers .... Substantially more of the Inner-City patients with a private doctor as central source used him for specialty as well as general care." These differences can possibly be understood when the importance of material circumstances as an influence on patients' choice of health care in the U.S. is taken into account.

The volume source of care refers to the source of care most frequently used by patients. The findings showed that for the vast majority at both hospitals, the volume and central source were one and the same.

The concept of the configuration of care "addresses all of a person's sources and attempts to encapsulate the essential ones in a meaningful framework. It does this by designating the individual's significant sources of care, and by inter-relating his sources of general medical and specialty care. The configuration retains only the important continuing sources used by the individual, eliminating insignificant details". The dominant configuration in both emergency service settings was that of the private physician. Nearly one-half of the inner-city emergency patients follow this pattern and so did nearly 70% of the suburban group. In the Inner-city group, the O.P.D. and emergency unit entered into the configuration of other much smaller clusters. The O.P.D. was essentially the sole source of care for 6% of those patients, and additionally with the emergency unit's participation with it in general medical care, the O.P.D. accounted for another 8%. In the suburban emergency group, the only significant cluster were the 11% who additionally resorted to the emergency unit for some of their general medical care.

The authors also tried to account for the circumstances that lead to unanticipated use of a hospital emergency clinic. They asked the patients how the emergency unit fitted into their own way of getting medical care and 73% of the Inner-City users as compared with 87% of the suburban users claimed to confine their use to emergencies.

The fourth concept is cohesiveness and compactness is considered. "Compactness" refers to the number of sources from which an individual secures his medical services. Cohesiveness represents a judgement as to whether the person's pattern of obtaining care has a unit or coherence about it. More suburban patients (51%) used a single source of care than inner city patients (37%) whereas more inner city patients (33%) used multiple types of sources compared with 17% as among suburban patients. Interestingly, a substantial proportion of the patients using a multiple source of care had a cohesive pattern of care, i.e. their multiple sources were used in a complementary rather than duplicatory fashion.

This approach has yet to be applied to the use of emergency services in this country although it has much in common with that proposed by the C.S.A., particularly as it refers to those "circumstances" which lead to "unanticipated use" of emergency services and which patients refer to as "emergencies". The assumption that for the majority of individuals

and families their routine pattern of health care revolves around the general practitioner is supported in the findings from Solon and Rigg's study. For the majority of patients in both areas the central source, volume source and configuration of care was based around the family physician.

The approach of Solon and Rigg to this issue in the U.S. is a relatively new one in that it relates patients' use of emergency rooms to alternative sources of medical care and also relates this use of emergency rooms to thepatients' overall pattern of medical care-seeking. The problem with this type of approach is that whilst taking the patients' behaviour seriously and a coherent theory of patient demand is built up the interpretation of patient behaviour is still made in terms of the authors theoretical conception of what the behaviour means. The question of why patients behave or act in a certain way is left to the interpretation of the researcher without recourse to the patients' own interpretation of why he or she follows a certain routine. Thus, whilst Solon and Riggs' approach is valuable, it doesn't go far enough in attempting to answer why patients behave in a certain way. This question is important, as it is the patients and others who make decisions to seek medical care, and the nature of the decisions are derived from a framework which may be distinctly different from that constructed by researchers.

The perception of patients of the applicability of different services has received attention in the U.S. literature. For example, Kahn et al (1973) noted that 'the patient's decision to use the Emergency Room is influenced by his perception of the accessibility of alternative case sources'. Thus the argument runs that the mere presence of facilities does not mean that the patient will perceive them as accessible.

A more recent study has taken Solon and Riggs' conceptual framework further and a more elaborate theory of patients' motives in utilising medical care settings is proposed (Stratmann and Ullman 1975). They outline the basic tenets of their theory of patient behaviour as follows:

"Our explanation of patient utilization is based upon the economic concept of utility. We assume that patients will utilize the facility that they believe will provide them with the greatest overall satisfaction which is a function of an appraisal of the merits of alternative sources

in relation to the patient's own unique set of evaluative criteria. We don't suggest that a person actually sits down with pad and pencil and calculates the costs and benefits associated with alternative sources. We do believe, however, that some sort of analogous sub-conscious reckoning does take place, and that the choice is the product of a deliberate decisional process" (Stratman and Ullman 1975). These authors therefore are among the earliest to emphasise the rationality of patient action in using the emergency room. In their community survey of households (N=527) in the Rochester area of New York State they looked at (1) public opinion about the role of the E.R., (2) the perceived urgency of the problems that people bring to the E.R., (3) the accessibility of medical care and (4) the factors that prompt the use of the E.R. rather than other sources of care. Perhaps the most significant finding from this study was that patients use of the Emergency room is associated with problems that they believe to be urgent. They conclude "Our results show that people can and do distinguish between the attributes of Emergency Rooms, given an urgent medical need, just as they can distinguish between the attributes of other sources of care for routine problems. Our analysis shows that many people evince an overriding concern for the location of the E.R., a matter that is apparently prompted by both their perception of the urgency of their medical problem and the accessibility of alternative case sources of care in that they use the E.R. for'urgent' conditions because it is more accessible.

The more telling remarks are made in the conclusion. "To understand patient utilization, we must realize that the utility of factors such as time, convenience, or discomfort that influence patient decisions is perceived differently by each person, this, of course, within the province of the professional to appraise the urgency of a patient's medical needs, and, admittedly, many problems are not urgent, by professional standards. But this does not alter the fact that they may be quite important to the patient. To assert, as some do, that these other matters should not be important to patients or to criticise patients because they do not conform to professional standards is presumptuous. In the public view, the E.R. is "a place to get medical aid in a hurry".

This assertion reflects a significant change in perspective on the utilization of emergency services as it suggests that the needs of the patient and the needs of the professional may be distinct and different. Therefore, notions of urgency and availability or accessibility of alternative sources of care must be seen in terms of the patient's world or the patient's

perception if we are to attempt to explain patients action.

Thus the American Studies have moved away from the mechanistic approach which emphasised the socio-demographic characteristics of attenders to the development of a more coherent explanatory framework which attempts to take into account patient perceptions. The studies which have emphasised the latter perspective still are in their infancy and little concrete evidence is available. Some studies such as the one carried out by Solon and Rigg did develop a useful conceptual organisation of patients help seeking behaviour. The problem with this type of approach is that the conceptual framework is developed without recourse to the views of the patient or to whether the conceptual framework bears any real relation to the patients everyday activities. With regard to the usefulness of these studies for the examination of the C.S.A.'s proposals it appears that whilst the circumstantial element is identified as playing some part it is not seen to be central to the explanation of patient utilisation of the emergency services. However, what is evident from these studies is that if we are to develop a model to explain patient use of the emergency services it must be based around the assumption that that patients are capable of and do make evaluations of the appropriateness of different medical settings for their conditions and these evaluations may be derived from a framework which is different to that of the professional. Therefore, the concepts of urgency and availability or accessibility of alternative source of care must be seen in terms of the patients perceptions.

The marked difference between professional and lay viewpoints is clearly shown in Roth's work when he discusses the question of urgency. Roth (1972) in outlining the advantages of the emergency medical department asks the question, "Why do people not use the emergency centre more often?" After all, the advantages of the emergency centre are substantial:- 24-hour service, no appointment is needed, urgent cases are attended quickly, diagnostic/treatment facilities are near at hand, inpatient admission is possible if necessary, and specialists are more or less readily on call. Whilst Roth is referring to the emergency clinic in the United States which may have been developed to deal with more general medicine it certainly has parallels with the British accident and emergency service. Roth's answer to his own question concerning the "underutilisation" of the emergency services is that patients perceive them as places for

accident or acute illness and are not aware of this non-urgent "function". However, he states, "As there is growing awareness of this non-urgent function then the use of emergency departments will become more routinised and the question of whether a given patient should or should not come will diminish as a category.

As was stated previously, patients' perception of urgency are closely linked with their perception of the accessibility of medical care services. This question of perceived accessibility of alternative sources of care has been shown to be important in patients' accounts of why they went to a hospital rather than attempt to contact a G.P. For example, Holohan (1975) is concerned with identifying the reasons why patients who did not contact their general practitioners but went direct to the accident centre. Table 2.2. shows the patients' principal reasons for self-referral in 182 cases. All these respondents were interviewed in their homes shortly after the attendance. The table includes responses to a similar question put to attenders at emergency clinics in Michigan, U.S. (Vaughan and Famester 1966). However, the two studies defined "self-referral" in different ways. The Michigan study excluded all those who made an attempt to contact a general practitioner on the grounds that (i) a patient who attempts to contact a general practitioner does not make a decision to use emergency services and (ii) one of the objectives of the study was to study the importance of the financial motives for using the emergency department and patients are unlikely to call a doctor first if they wanted free medical care. In the Newcastle study, only those who made contact with G.P. or receptionist are excluded.

The results show the "availability or accessibility" explanation predominates in both studies. This may imply that for the majority the G.P. is felt to be not available and so they attend the hospital. However, the categories in the Michigan study have attempted to take into account the circumstances and the role of "others" in the decision-making process, by differentiating between patients attending on their own volition and those being taken by police, ambulance or being sent by employer and teacher. In contrast, in the Newcastle study, Holohan was not concerned with identifying the context in which the decision was made. Thus, the patient gives the reasons given by patients for using the accident centre which may not have been the result of their own decision.

It is interesting to find that in both studies the second most

Table 2.2

Newcastle		Michigan	
Patients' principal reason for self-referral	%	Categories of reason for physician not called	%
Availability of hospital care	32	Patient believed private physician not available	43
Appropriateness of hospital care	17	Immediate care or hospital facilities were required	15
Accessibility of hospital care	13	Patient taken involuntarily by police amb. etc.	6
Automatic reaction	10	Patient sent to hospital by employer, teacher	11
Anticipated referral	9	Patient became ill whilst at hospital	6
Other	20	Hospital is more convenient or no family physician	11
	100%	Insurance coverage for hospital care	2
		Other reasons	6
N = 182		N = 1956	100%

frequent reason given is that hospital facilities are appropriate. This may imply that patients have a general notion about certain conditions that should be taken to hospital rather than to the general practitioner. This 15% of total attenders in the Michigan study and the 11% (maximum) who came because of convenience would be the only groups of patients that would not fall into the C.S.A.'s "social predicaments" categories.

A further point refers to the question of asking people why they came to the accident centre. The use of the question 'why' or any related questions implies that the decision of whether to go to the general practitioner or accident centre is both a real one for the laymen and a problematic one in that they are asked to "account" for it. "Accounts" in this context imply justification of behaviour or what Scott and Lyman (1970) have called, a normalisation of deviation. This normalisation process may mean that patients who are aware of the hospital philosophy about the "appropriate" use of the service will answer in the ways that will fit with this philosophy. There is also the question of the relationship between explanation and behaviour. Patients' accounts of what happened at the scene of the 'episode' may be coloured by a number of factors which may have occurred after the episode and they may in fact have 'constructed' an account of what happened. For example, Stimson and Webb (1975) in their study of interactions in consultations between doctors and patients suggest that patients tend to exaggerate the degree of their participation in the consultation.

Holohan has developed a different explanation for patients' use of accident centres. She argues that the patients who attend for accidents have a different set of motives and a different social background to those attending for non-trauma. Whereas other research studies have suggested that, because of the circumstances many patients use of the accident centre is unanticipated, Holohan places more emphasis on patients' intention. She argues that general practitioners have only a minor role to play as legitimators of referral in cases of trauma and explains this by suggesting that in the majority of trauma, diagnosis is in the realm of competence of individual and colleagues and thus the doctor is needed only in the instrumental role for treatment. The accident was regarded by the patient as an isolated incident which did not have a prolonged medical history needing continuity of treatment. Thus, patients are much more likely to see the casualty doctor in this instrumental and technical role rather than

a general practitioner where the interaction may be more expressive. Holohan's assumption about patient behaviour implies that the choice of treatment depends upon patients' ability to evaluate signs and symptoms and make a diagnosis. From such an evaluation the most appropriate agency is used.

The patients who attended for non-traumatic conditions are described as being mainly socially isolated who accordingly sought little advice from those around them. In some patients this isolation was extended to their relationship with their general practitioners. Hospital care was sought primarily for diagnosis but many patients felt that a relationship with professionals was possible only in a hospital setting.

This last approach is important because it brings a different approach to explaining patient action. In essence Holohan argues that when patients know what is wrong with them the medical help needed is entirely technical and thus the doctor-patient relationship is of limited importance. This is not totally incompatible with the authors who have suggested that patients' perceptions of the urgency with which medical help is needed is closely linked with their choice of medical care setting in that the clearer idea that a patient has about what is wrong the more likely they are to know their condition is "urgent" or not. With regard to the C.S.A."s proposition, Holohan's position suggests that circumstantial influences play an insignificant part in the choice of medical care setting especially with regard to traumatic conditions.

It is evident from the above that there is little evidence available from published research in either the U.S. or the U.K. which examines adequately propositions which are similar to those developed by the C.S.A. However, if the C.S.A."s approach is to be examined it must be couched in a coherent theory of patient demand which attempts to make sense of the number of influences on the choice of medical care that have been suggested in the above literature review. More specifically, in this theory of patient demand it will be important to examine the relationship between the circumstantial elements which the C.S.A. have suggested as being significant and patients of patients' families' views about the utilisation of alternative sources of medical care. As yet, according to the literature reviewed in the above, no such attempt has been made to integrate the two.

3. Sociological literature on illness and utilisation behaviour

Over the last twenty years there has been a vast amount of literature on the subjects of illness behaviour and the utilisation of the health services (see McKinlay 1972). What started as a recognition that a large majority of the population had signs and symptoms of ill-health but didn't utilise the health services went on to the conceptualisation of illness as a social construct and illness behaviour as a social process or 'career' and has generally led to the development of more coherent overall theoretical frameworks for understanding laymen's action in the face of problematic experiences.

This is not the place to go into great detail about the various sociological approaches to illness and illness behaviour, however, it is useful to describe, fairly briefly, some of the criticisms which have been recently directed at previous work in this area as they can be directly applied to much of the work that has been already reviewed on utilisation of accident and emergency services. These criticisms are taken from Dingwall's work (1976).

Dingwall (1976) has organised the research on illness behaviour into what has been termed the individualistic approach and what has been termed the collective approach. The former attempt to account for observed behaviour by reference to the personal characteristics of individuals; these may be derived from some form of psychometric assessment such as that of Kosa et al (1966) which emphasises the significance of 'anxiety' as a factor in producing variations in illness behaviour. Examples in the field of the utilisation of emergency services are found in Perkoff and Anderson's work (1970) on the relationship between demographic characteristics, patients' complaints and use of the emergency room. The collective approach places individuals at the nexus of a balance of social forces and accounts for their behaviour in terms of the forces that impinge. An example of this work is Suchmann's (1964) study of the underutilisation of medical facilities by the poor and ethnic minority groups. In this particular study underutilisation is explained in terms of the deviant or deficit beliefs of these groups due to social disorganisation as opposed to the fit, between the values of the medical profession and the mainstream values of middle class American society. An example of this type of approach in the area of the utilisation of accident and emergency services is found in Wingers et al (1968) work on the relationship between types of family organisation and the utilisation of peadiatric emergency services.

Dingwall (1976) has outlined a number of substantive criticisms of both of these models but only the more general theoretical issues which are common to both models will be described. Dingwall argues that the major weaknesses in these studies from a sociological point of view are first that their dependence on the methodological procedures of the natural sciences means that it is assumed that natural scientific phenomena are the same as social phenomena. Dingwall argues that this is not the case and whereas natural phenomena merely behave human beings act and they have intentional action and language. Dingwall emphasises the need for sociological work to examine individual action and the meaning of that action and to assume that actors are empty organisms responding passively to the demands of the social system. Thus, whilst it may be useful to relate social class or family size to utilisation behaviour the important question to ask is why such a relationship is found. Secondly, Dingwall argues that this dependence on natural scientific methods in social enquiry also reflects a specific orientation towards knowledge. This approach claims that its theories and explanations and bodies of knowledge have a unique access to truth. This is an absolutist version of knowledge in contrast to a pluralist approach in which all accounts of the world are of equal status. Therefore medical theories and lay theories are, from a sociological point of view, of equal interest and status. Magic, religion, politics, science and sociology can all be seen as folk systems for understanding the world. These can all be taken as equally as seriously.

Dingwall argues that previous studies of illness behaviour, through their reliance on natural scientific methods have failed to develop a truly sociological theory of illness. They have concentrated on behaviour without attempting to understand the meaning of that behaviour and thus have failed to develop a sociological theory of action. Implicit in this dependence is an acceptance of an absolutist version of knowledge and this acceptance has meant that many of these studies have based their assumptions about lay and patient behaviour on a version of the social world which has been derived from official medical practitioners and they have treated this definition itself as unproblematic. Thus lay theories of illness are treated as idiosyncratic or reflect some pathological irrationality. Lay theories are treated as in some way inferior to biological and medical explanations. Dingwall argues that since clinicians' accounts have no known relationships to the accounts of sick people of their own experience, they cannot advance the understanding of illness as social conduct. For Dingwall a biology

of illness is complementary to a sociology of illness and in no way a substitute for it. Each has an autonomous realm of problems and once this is accepted a more pluralist approach to social life can be developed.

Before alternative models are described a number of comments on Dingwall's criticisms will be made. Firstly, it is evident from the previous review of the literature on emergency service utilisation that more recent research in this area began to recognise the need to view the patient or proto patients as a social actor with the ability to make judgements and decisions in a critical, rational and reflective manner. Thus, Dingwall's point about the need to examine the meaning of individuals' action has been taken in some respects although the methodologies used may indicate a not too clear framework in which the patient's action can be understood. In many ways these approaches suffer from the weaknesses that Locker (1979) has identified in Mechanic's approach to illness behaviour. Locker argues that whilst Mechanic's concept of illness behaviour does challenge the deterministic approach of others by recognising the differential responses of individuals to those phenomena in fact his idea of illness behaviour as a social process is nothing more than the interaction of factors or variables in a unidirectional pathway of cause and effect. As he says in Mechanic's theory "man is reduced to a medium through which variables operate to produce behaviour". In much of the research on utilisation of accident and emergency services whilst researchers have beoome sympathetic to the approach focusing on the "intentions" or "motives" of laymens action in their empirical research the image of man that has been adopted is similar to the one that Locker criticises Meachanic for adopting.

If this first point has been taken then it is also evident that Dingwall's second point about taking the culture or body of knowledge to which laymen adhere to in their decision-making about illness or injury as distinctly different from the framework of knowledge in which medical practitioners' work has not been recognised. Certainly much emphasis is placed on examining the 'problem' of what are the influences on the choice of medical care systems which itself is a problem for those involved in the medical world. Not surprisingly, therefore, not only has it been taken for granted by some authors that this organisational issue is also an issue for the patient, but also that in trying to explain patient's choice of treatment the notion of injury and illness has been taken for granted as being unproblematic.

In other approaches to illness behaviour, notably those by Robinson (1971)

Fabrega (1973) and Dingwall (1976) the research question has been changed from "Why do people not use the official health services" to "What is Illness", "How do people come to feel ill and what do they do aboiut it?". Now in each of these three approaches there appears to be a tacit acceptance that man's ability to evaluate, interpret and define the meaning of his world and the world of others will be influential in the course of action that he follows. Whilst these writers are not talking about "causal" influences on action they do explain illness action in terms of the antecedents of the action. As Locker puts it (1979) "respondents statements are taken to be descriptions of the actor's point of view within which measures the precursors of action, can be located".

The two most comprehensive theoretical models are those developed by Fabrega and Dingwall. In his theoretical model Fabrega (1973) focuses on the information that a person might be expected to process during an occurrence of illness. "Concentrating in a theoretical way on informational correlates of illness can be seen as articulating a set of rules that organize the data of illness (i.e. sensations, perceptions, beliefs, circumstances, etc.,) and explain the culturally appropriate acts or behaviour associated with illness occurrences in various contexts". He divides the 'person' into four analytically distinguished systems which are open or connected.

1. Biological - includes chemical and physiological processes
2. Social - includes relations between person and other groups or institutions
3. Phenomenologic - involves states of awareness/self-definition
4. Memory - unique history of the person includes experience gained from deviations in other three systems (illness categories).

Using these interlinked systems the person is continually capable of monitoring happenings and processes in the functioning of the various systems. A new deviation can be judged because of the availability of information experienced and internalised from other deviations in functioning or through the availability of "illness categories". The information available to the individual during an illness occurrence is processed in nine stages.

1. Illness recognition and labelling - conviction that an undesirable state of affairs exists
2. Illness disvalues - evaluation of illness's meaning/or significance
3. Treatment plans - each person is believed to have available a set of unit treatment actions that can be implemented for purpose of coping with illness

4. Assessment of treatment plans - each person is capable of estimating the probability that a treatment plan will alleviate a negative component of illness
5. Treatment benefits
6. Treatment costs
7. Net benefits or utility
8. Selection of treatment plan
9. Set up for recycling

This is a complex model but it is evident from the use of certain terms that, as Fabrega admits, the approach is taken from traditional economics and elementary decision theory. People are basically rational and they will evaluate an instance of illness using the principles of cost-benefit analysis and will reach a decision regarding the best of optimal action that might eliminate the illness.

The C.S.A.'s proposition would be relevant to Stages 3 to 7 in that they might argue that circumstantial elements would influence treatment plans. However, whilst this model is clearly valuable for situations where the person is in control it is not clear about what happens when others play a part in the decision-making processes.

Dingwall's model of illness action is similar to Fabrega's in that it distinguishes between the occurrence of biological events in the human body and the meaning of those events for the social actor. He argues that "biological events occurring in human bodies are no more intrinsically meaningful than any other natural or social phenomena. They likewise need to be cognitively organized and interpreted before becoming relevant conditions for social action. This may of course include recognition of one's lack of comprehension and the need for inquiry as well as a positive identification of the phenomenon. Biological events may of course to some degree impose limits on the available possibilities for action, as in the case of paralysis, for example. However, for the socially competent actor, the sense and import of those limits is a cognitive phenomenon... The limitations that paralysis imposes take on a meaning only in the context of the desires of the paralysed individual". For Dingwall, then, if a model of illness action is to be developed it must focus on the theories that individuals make use of in the context of disease.

Dingwall's explanation of the principles on which his model is based is complex and this is not the place in which to discuss them in depth.

However, Figures 2.1 and 2.2 show the model and there is a need to briefly summarise the main aspects of it.

Figure 2.1 shows the basic model proposed by Dingwall. The model shows that when a disturbance affects the body, depending on the priority accorded to the disturbance (i.e. the actor has a range of priorities within his plans in which body disturbance is located) the automatic expectation of a stable and predictable relationship between a person and his body cannot be sustained. If he is to continue to sustain a presentation of himself to others as an essentially normal person then remedial action is needed. Figure 1 shows the various processes that the actor goes through beginning with interpretive work of the problematic experience, a decision to act is made and effects of treatment are assessed.

The advantage that Dingwall's approach has over Fabrega's is that Dingwall gives a more detailed description of how a disturbance in body functioning becomes a problematic experience for the patient. Dingwall suggests that whilst the actor may examine the disturbance in terms of costs and benefits his initial concern about the disturbance is that it may interfere with the maintenance of his identity as a normal person.

Figure 2.2 shows an expanded version of the model which incorporates a number of aspects, two of which are the influence of the interpretive work of lay others and the introduction of official health knowledge. The introduction of these two concepts have implications for the C.S.A.'s proposal in that he incorporates a "circumstantial" element into the model. For example, Dingwall whilst outlining the importance of the process of interpretation, delay and consultation between lay actors, also refers to this process being "short-circuited" by a set of special circumstances. He states:

"The principal events in this set are screening programmes and accidents... Screening programmes may reveal disturbances of which the sufferer is unaware, while accidents may create disturbances so suddenly that the sufferer is unable to act. Accidents may, moreover, short-circuit in two ways, either through the intervention of official medical agents or through the intervention of other laymen. The latter applies particularly to accidents in public - car accidents, train or aircraft crashes, earthquakes and other natural catastrophes. In these cases we may find a relatively direct input of official health knowledge and official health services that we would not otherwise see until after a considerable amount of lay interpretation".

This argument has important implications for the C.S.A.'s proposal in that the lay others or the official sources of health knowledge in these cases could be policemen, teachers or employers or they could be bystanders who bring with them a lay knowledge which may be different from that which they would use with their family or themselves. The C.S.A. go further than this by discussing not only the implications of the "short-circuiting" of this system in terms of the courses of action taken but also the impact of other socio-legal and moral pressures facing those who bring official health knowledge to the situation.

The importance of this model therefore is that at a general level it incorporates the circumstantial elements proposed by the C.S.A. within a model of illness action. More recent studies of cardiac patients (Cowie, 1976) and those with venereal disease (Harrison 1979) have used a similar framework to Dingwall's although in the latter case a number of modifications and criticisms are suggested. Neither of these studies has examined the importance of this 'circumstantial' element which will be a feature of this study.

Conclusion

The main objective of this review of the literature was to find out how previous research had defined the "problem" for study in the area of utilisation of the accident and emergency services and how these "problems" were approached. More specifically the aim was to examine available research evidence to see if it shed light on the validity of the C.S.A.'s proposals. This evidence suggests that little research has been carried out specifically related to the proposals of the C.S.A. although many different concepts have been developed which are valuable as explanatory tools in the complex area of illness and utilisation behaviour. In more recent years attempts have been made to account for utilisation of emergency services in terms of broader models of patient demand for health services. In particular there has been a movement towards treating the layman's view of illness or injury as valid within the context of the study of illness behaviour. The model of illness behaviour developed by R. Dingwall (1976) appears to have significance for this study as it locates, if only on a general level the C.S.A.'s proposals in a theory of illness action.

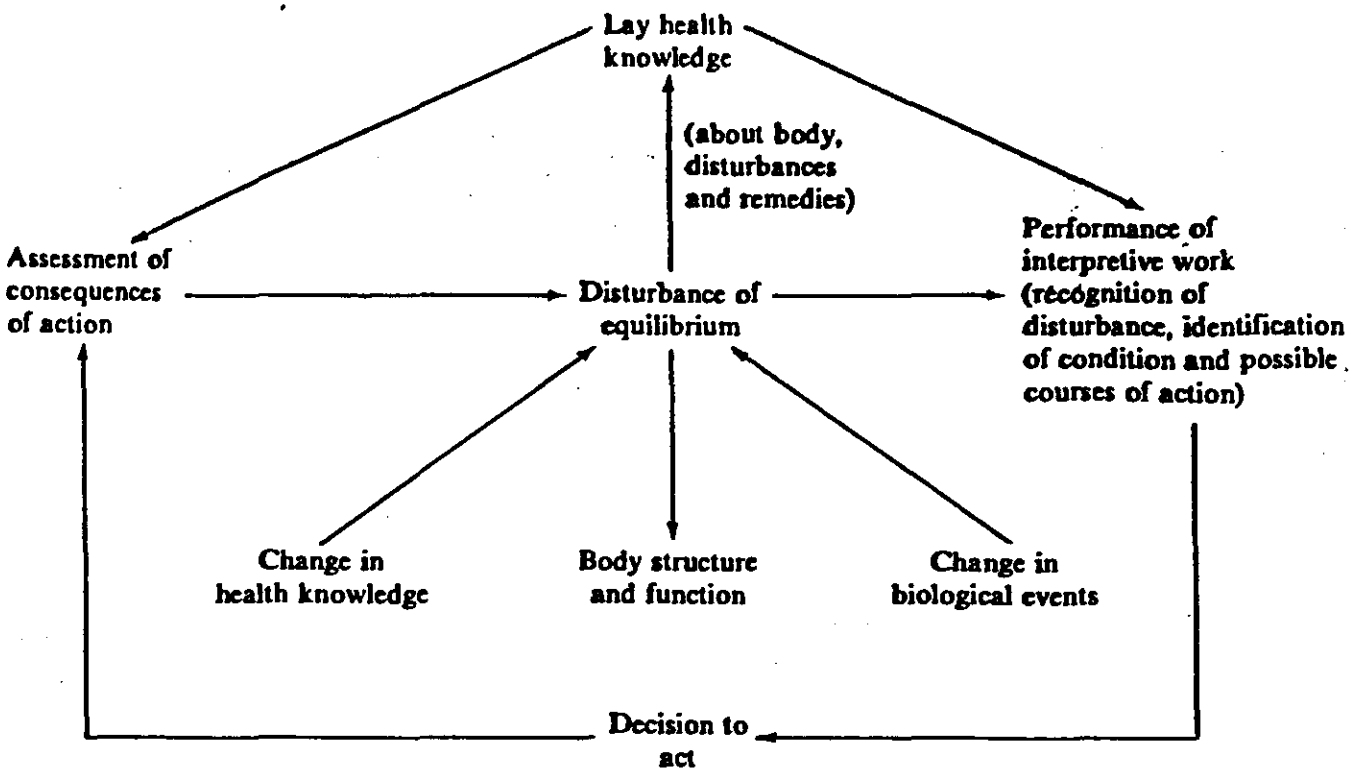

Figure 2.1 *Basic structure of illness action model*

(from: R Dingwall, Aspects of Illness in Everyday Life, Martin Robertson, 1976

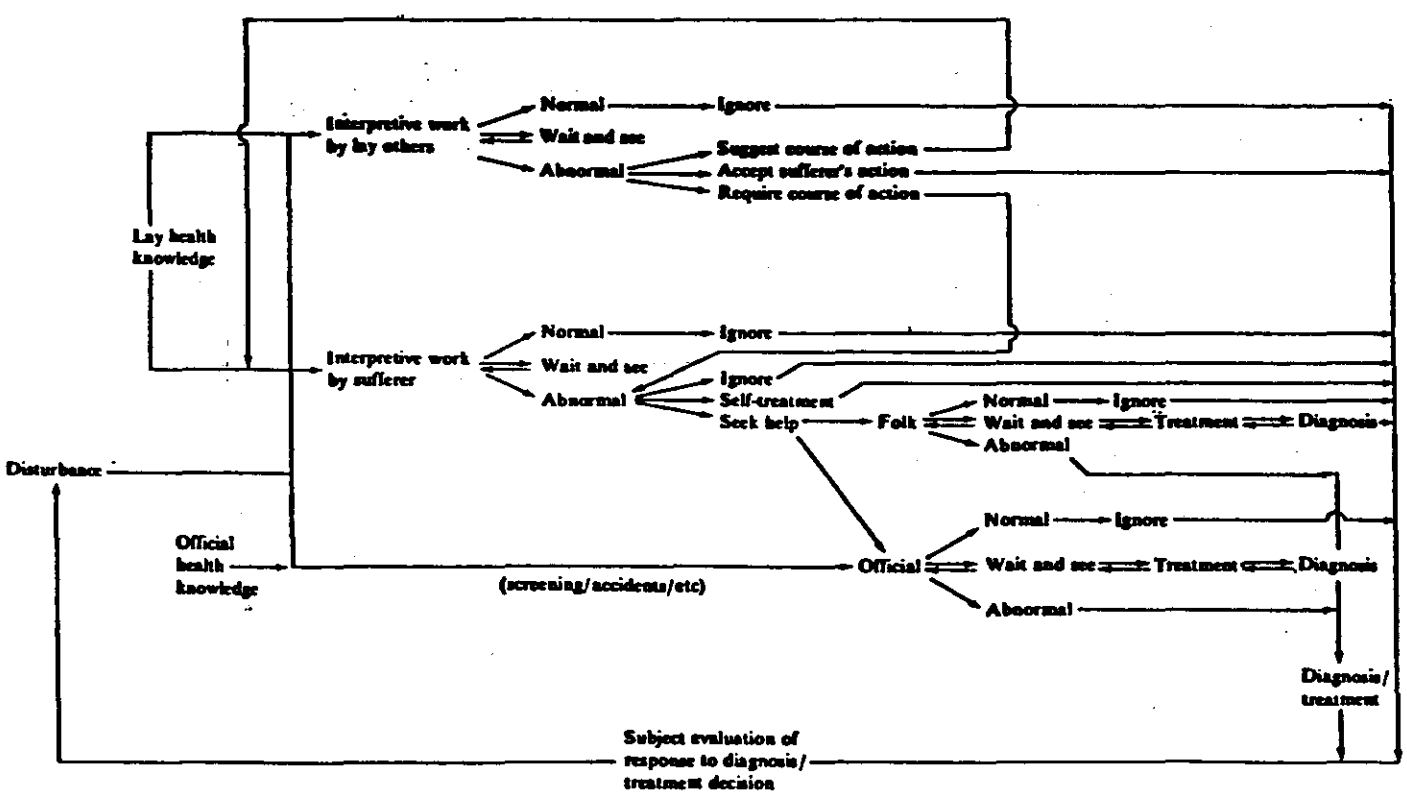

Figure 2.2 *Some pathways through illness action model*

Table 2.1

Results of multi-discriminate analysis

	Epidemiological	Non-epidomiological
Best predictors	Distance - to G.P.s surgery Distance - to the hospital Age - older patients tend to seek general practitioner care Diagnosis - Fractures/ wounds are more likely to opt for hospital care Partnerhsip size - patients with single-handed practitioners tend to present to the A.E.D.	Site of Decision - decisions taken at the site of accident are more likely to lead to hospital Advice - patients who make their own decision or receive advice from family go to G.P. Patient's preference for care when confronted with hypothetical problem of a 'small cut needing stitiches' Whether patient expects 'small cut' to be stitched by doctor or a nurse at hospital Whether patient expects his G.P. to cope with a sprained ankle himself or sent it to hospital
Significant assoc. but no sig. imprv. to prediction of choice	External cause of injury Sex Marital status Attendance at an A. and E. within past year	Site of the accident
No demonstrable effect on patient's decision	Social Class Admission as a hospital inpatient in past year Attendance as a hospital outpatient in past year No. of G.P. consultations within past year Duration of registration with his G.P. Whether his G.P. uses an appt. system Whether his G.P. uses deputising services	Time of the accident Day of the accident G.P's estimate of the frequency with which he straps sprains

Chapter 3

Research Objectives, Design and Methods

Research objectives: a detailed statement

In the light of the literature review in the previous chapter it is now possible to specify the research objectives in more detail. The major aim, as was stated previously, was to examine the C.S.A's propositions in more depth. However, it was evident that to do this adequately the sample must consist of a representative group of attenders at an accident centre and at general practitioners as well as a representative group of the population who did nothing at all. Such a study would need to be a prospective one and the data collected through observation at the 'scene' of the episodes thus placing the emphasis on 'illness' and perception of disorder rather than 'utilisation' behaviour. The practicalities of such a research design have already been discussed and previously researchers have had to make do with comparing samples of accident centre attenders with general practitioner attenders with clinical conditions for which the patients are believed to have a choice of treatment facilities. These data are usually derived from the 'accounts' of patients after the episode has happened.

In this study, there was the added difficulty of using only a sample of accident centre attenders. Thus this study was descriptive as it can only provide part of the information to examine the C.S.A's proposition adequately. Taling such limitations into account, this study was carried out in the following way. The study was divided into two parts.

1. A random sample of attenders at the accident centre in the Kent and Canterbury Hospital were studied. The aims of this part of the study were threefold:

(a) to gain an overall picture of the characteristics of the case-load of the accident and emergency department over a period of one year.

(b) to gain an overall picture of how, where, when and why patients come to an accident centre, thereby providing part of the information necessary to test the C.S.A.'s proposition.

(c) Using the data presented in (a) and (b) above, an analysis was carried out examining the relationship between various factors and initial choice of medical care system. The research design obviously limits the interpretation of these data but the analysis will provide useful evidence for further study.

2. The second part of the study examined the 'circumstancial element in more depth. In particular, a small number of 'episodes', all selected from the main sample embracing a variety of locations where episodes occurred and involving contact with the police, teachers, employers, first aid personnel and lay others were examined. The researcher interviewed a number of these people about what they did in the particular episodes and why they did it, and related this particular episode to what they normally did when faced with the ill or injured and why they have adopted such procedures.

The theoretical and conceptual approach

Before the more technical and practical aspects of the research design are described there is a need to discuss some of the theoretical and conceptual aspects of the approach adopted in this study.

In the previous chapter the importance of placing the C.S.A.'s propositions into a coherent framework of illness action was emphasised. The assumption being that people do not just behave or react to external circumstances or react to 'external' conditions but they interpret and this action is based on this interpretation. In the case of illness, illness behaviour and utilisation behaviour it is not enough to say individuals react to symptoms in different ways and different social contexts lead to variations in patterns of action. Individuals interpret and evaluate problematic experiences according to the meaning that the disturbance has for them in their everyday lives. This interpretative process will be the basis on which their judgement or decisions are made. Sometimes this decision-making process instead of being based on the cost-benefit model is routinised (see Bloor 1978) because the individual or individual's family is confronted by phenomenon which are familiar. Thus the individual has available a plan or recipe for action which he takes for granted. Sometimes the action has unintended consequences. Thus, if the C.S.A. proposals were to be taken seriously, they have to be translated into a model for illness action which emphasised both the interpretive power and practices

of individuals as well as the interpersonal nature of social life. Possibly one of the most coherent theoretical models of illness action to be developed to date was that proposed by R. Dingwall. Not only did it incorporate all the conditions described in the above but it also appeared, if only superficially, to be able to account for the 'circumstantial' elements in terms of a model of interpersonal relations. As with most theoretical models their major weakness is their generality and Dingwall's is no exception. However, given the approach adopted by Dingwall with its emphasis on examining how individuals themselves interpret and confer meaning on body disturbances it would be illegitimate for him to attempt to explain these processes without recourse to empirical data. So the usefulness of the Dingwall approach is that it has translated the 'circumstantial' elements into a meaningful framework but it cannot help with explaining the nature of the interaction between laymen and 'others', and why, as a result of that interaction, certain courses of action are followed.

In this study two specific questions are of interest:

1. What makes a patient choose to use the accident and emergency rather than alternative sources of available medical care?

2. What influences the timing and place of the decision to seek medical cure?

As I have shown, both these questions are questions which are of interest to the researcher and have been constructed by him. An attempt has been made to translate them into a more coherent theoretical framework. The application of this framework to practical research poses considerable methodological problems. Problems which of a general nature and would apply to any research design in any research context and those problems which are specific to this research context.

On the general level, Locker (1979) has identified a fundamental problem for the application of this type of theory to empirical study. He says

> 'Whether the assumptions that actions emerge out of meanings can be verified is something of a problem, for in order to know what meanings were operative at any point in time the researcher has to make judgements about meaning himself or rely on the accounts presented by the action concerned. The first is illegitimate, and for the second to have any currency, those accounts must be collected at the time the actions are being studied and constructed'.

Locker queries the possibility of gaining such information as he says one would need 'to get inside a person's head to prove direct connection between meaning and action'.

The value of retrospective responses will be discussed more fully later. Apart from this fundamental problem highlighted by Locker there are also specific methodological problems which the research was faced with in this research context. Ideally, the research should take a random sample of the population and monitor their health and illness behaviour through observation and interview. This would have enabled the researcher to identify when, how and why individuals contact different professional medical agencies. As the main focus of the research was to identify what went on in situations where the individual's routines were disrupted or as Dingwall puts it 'short-circuited' by an input of official health knowledge we would have had to wait for our respondents to become involved in such 'episodes'. Obviously, this would be possible only in a situation where the researcher had unlimited time and resources as well as continuous access to the subject's daily lives. Therefore we had to limit the study to sampling from the population that attended the Accident and Emergency department. This enabled us to contact patients who had come to the hospital after being involved in episodes in a wide variety of social situations. Obviously, this emphasis on help-seeking is not the best way of identifying subjects if Dingwall's approach is to be applied but given these practical constraints the choice was limited. Also, it would have been of limited use asking a random sample of the population about their action in various social situations. Such data may be useful but without specific episodes to focus on, the detail which we were interested in may not have been forthcoming.

The two questions, listed in the above, were approached in this study on two levels. Firstly, and see 1(c) in the previous section, a statistical analysis was carried out to examine the relationships between certain variables and initial choice of medical care system and site and timing of decision to seek medical care. These data provided a backcloth to the qualitative data which are based on the accounts of various people involved in episodes in different social situations of why they followed the courses of action that they said they did. It was felt that these qualitative data would complement the statistical data in that it would provide explanations of why certain variables seem to be associated and would provide detail of the social processes and interactions that led to a certain outcome. However, to argue that these two levels of data can complement each other is itself problematic. All that the statistical analysis can offer is an indication of whether there are any statistical regularities in the analysis, e.g. episodes that occur at home are more likely to lead to the patient contact-

ing their general practitioner. It must be emphasised that the relationships between the variables themselves and between the variables and outcome variables are essentially a statistical construct and are based on the commonsense theories of the researcher. Thus the variables include organisational variables such as the time and the day of week of decision to seek medical care, circumstantial variables, such as socio-environmental location of the episode and the site of the decision to seek medical care, socio-demographic variables, such as the age and sex of patient, behavioural variables, such as the status of the decision-taker and sociological variables, such as patient's perception of the emergent nature of the episode and the patient's routine pattern of medical care seeking. The latter concept is represented by responses to questions on the patient's normal source of medical care and the alternative if that person or agency is not available, previous use of the accident and emergency services, and answers to hypothetical questions about choice of medical care systems in the face of specific complaints. Whilst this statistical mode of analysis does attempt to incorporate the influence of the organisational, circumstantial and patient's perceptual factors, it has no explanatory value as it lacks theoretical coherence. Many of the variables are of different epistemiological statuses and to develop a coherent framework each variable should be on a similar epistemiological plane. It would be impossible to translate this analysis directly into a model based on Dingwall's approach as many of the variables are constructs proposed as being important by the researcher on the basis of previous research whereas Dingwall's model argues for the construct to be developed out of patients' own theories. For this approach to have some value there is a need to translate the significance of external social constraints or events into their meaning for the actor. Thus external social constraints or events are not denied significance in having implications for individual action but have to be mediated through individuals' cognitive interpretations.

In terms of the purpose of statistical analysis the results are useful in pointing to possible relationships between different conditions and choice of medical care setting but questions as why such relationships appear to exist or whether such relationships exist in every day life cannot be answered at this stage. The uneasiness with which these two different types of data, the statistical and the qualitative (illness action) approach relate to each other seems to stem from two points. First, the failure of the statistical type approach to be able to take into account the individual's own meaning or intentions. Second, the failure of the 'interactionist' approach to develop a theoretical link between interpretation and outcome.

In the second part of the study the relationships identified in the first part were examined and attempts were made to explain them and to see if and how they are provided in everyday life. Ideally, all aspects of Dingwall's illness behaviour process should be examined but this would have proved practically impossible. So in the light of the preliminary findings from the pilot and main studies this part of the research concentranted on 'episodes' involving the referral of patients to medical care services after contact with individuals who are not normally involved in the patient's network of consultation when deciding to seek medical care. By interviewing both patients and others and concentrating on specific episodes it is hoped to gain some insight into the part played by 'others'. Of equal interest is whether such people had routines for dealing with injury and illness and if these routines were based on the principles derived from official health knowledge or if other non-medical influences were involved.

Finally, some problems of interpretation are raised by having to use retrospective accounts. First, in the statistical analysis the respondents' accounts were taken on face value or as literal accounts and some of the data were used as 'facts'. For example, where the episode occurred, who the person spoke to, how the episode happened, where the decision to seek medical care was made and who made. We assumed that most of these data would be free from interpretation because of their apparent 'neutrality' for the respondents concerned. Secondly, where the interview talk was the basis of the analysis, a problem arises because throughout the importance of seeing the individual as interpretive has been emphasised. Given both the sufferer and others give retrospective accounts of what they did and why they did it, their stories could have been coloured by their state of knowledge at the time of the interview as well as their interpretation of the context of the interview. In the sense that taking these accounts as literal translations of what the individuals meant by their actions at the time of the episode may not be sufficient. It is not only that the respondents may give the interviewer a 'public' account or an account which they feel the interviewer wants to hear or one that fits in with what they believe to be official morality it is also that since the episode or episodes happened, the respondent himself may have constructed an explanation for himself which appears 'rational' and which may have little to do with what he really felt at the time. However, such limitations do not totally undermine the usefulness of these data for the present purposes

for they do indicate rules and conditions which respondents use to guide them in social action. This is of particular relevance to people whose part of everyday work is to make decisions about what to do with people who are ill or injured. This is particularly true of the police where they are frequently dealing with injuries or sudden illness. In the circumstances individuals develop 'rules of thumb' which although adapt to altered circumstances do not change significantly in their interpretation. Whilst actors may be concerned to justify past actions it is assumed that explanations of the basis of routines do not change markedly from context to context.

Sampling procedure

A random sample was taken of all new patients who attended the accident centre over a period of a year, excluding only those patients who were categorised as 'rung in' admissions[1]. A separate study is being carried out on this particular group (see E.P. Abson, forthcoming). In all, 637 attenders were sampled. Given the major aim of the study was to identify the circumstantial element in utilisation of the accident and emergency department it was important to have a sample that embraced all types of new patient that attended the department. Hence, the sample was taken throughout the 24 hour period. The sample had to be taken over a year because of the influx of tourists and other visitors during the summer months. It was assumed therefore that the sample would accurately represent the population of new patient attenders. No other study carried out in this country up to now appears to have used as representative a sample as this one. However, it was stated in Chapter 1 that the catchment population of the Accident hospital varied according to the availability of the peripheral casualty services. Thus the sample may be a random sample of all new patients attending casualty services in the East Kent area during the night but not during the day.

The sample was selected by taking a random number out of a range of 1 to 50, in this case it was 39, and using that random number for selecting out the target respondent from each subsequent group of 50. Thus the 39th patient in such a group of fifty was selected for interview. The corresponding numbers were asterisked in the casualty register, so when

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[1] 'Rung in' admissions are those cases where a general practitioner has organised the admission of one of his patients and the patient is admitted through casualty.

the patient arrived at the accident centre it was possible for the receptionist to identify him. Each selected patient was given a form outlining the purpose of the study, emphasising the confidentiality of the data and asking for their co-operation and also for an appropriate time for interview. This form was given to the interviewer who went to the patient's home where possible at the appointed time.

On the practical side of the day-to-day running of the study this sampling procedure worked well and was carried out efficiently by the reception staff. However it was assumed that all new patients who attended the accident centre were registered in casualty and that the sampling procedure would be representative of the population new attenders. However, it became evident sometime after the study started that not all patients going to the casualty were entered in the register. In some cases where the staff felt attendance was 'inappropriate' then the patients were redirected and not registered. Thus they would not have been available for sampling. It is believed that this group made up a 'small' proportion of the overall patient load although a more accurate estimate is being identified.

The study itself began on June 27th, 1977 and finished exactly a year later.

Data collection procedure

In the first part of the study where possible the patient was interviewed in his or her own home as soon as possible after attendance at the accident centre. The reasons for interviewing in the home rather than in the accident centre were three-fold.

1. Part of the C.S.A.'s proposition involved finding out what happened after the patient left the hospital.

2. After pilot interviewing in the hospital it became evident that patients' answers could have been influenced by their presence in the hospital setting in that they were aware of the rules that the hospital followed and didn't wish to upset these rules which could interfere with their treatment.

3. Many patients were too ill to withstand a 45-minute interview at the time of their treatment.

The problem about interviewing in the home even only a few days after the event happened is that the patient's account is retrospective, and it may have differed from an earlier account given directly after the event had occurred. The later account may have been coloured by information which had been received since the attendance at the accident centre. Whilst it is not suggested that there is such a notion as the 'true' account, it is believed that the earlier account may be a little nearer to what the patient understood to have gone on at the time of the episode than the later account.

Most of the interviews were carried out in the patient's home after attendance at the accident centre. When the patient did not live permanently in the area and was only spending a short time in the area then the interviews were carried out in the hospital. When it proved impossible to get an interviewer to the hospital in time to see the patient, e.g. in the middle of the night, the patient's home address was written on the appointment form and the patient was sent an interview schedule which he was asked to fill in and return in a stamped-addressed envelope. This latter group proved to be very small and over half of these types of patients returned the form duly filled in.

The interview normally laster 45 minutes. The majority of the interviews were carried out by one interviewer who had been previously trained by the Health Services Research Unit. She was supported by another interviewer who tended to work the more 'unsocial' hours or be willing to be on 'call' at weekends, etc. The interviewers were further trained by the researcher.

The interview schedule itself (see appendix) was semi-structured with a number of open-ended questions. There was a need for such questions given the wide variety of circumstances that led the patient to visit the accident centre. The length of the interview was such that the interviewer had to fill in all the questions at the time of asking. However, this so interfered with the rapport and limited the amount of answer being filled in on the form that the interviewers used tape-recorders as a 'memory' and the forms were filled in afterwards. It could be argued that because there are two interviewers on the project there would be variation in interpretation and extraction of what is considered to be 'relevant' data from the tapes to the schedule. The researcher did attempt to maintain some consistency by taping interviews and getting the interviewers to fill in the forms when listening to the tapes. This was done for each interviewer for a number of

different tapes and the questionnaires were compared. Differences did occur on some questions and the researcher attempted through discussion to resolve some of these.

In the second part of the study 'episodes' were selected from the main study on the basis of their occurrence in the circumstances which involved contact with public officials and other people. The patients, their families and the 'other' contact were then interviewed. A similar questionnaire to that used in the main study was administered to the patient but the 'other' person was interviewed separately. The latter interview was also being taped and the tape was subsequently transcribed. The interviewer had a list of topics or areas to cover but as the study was in many ways exploratory the interview was less structured than the others. Thirty to forty 'episodes' were included in this sub-study.

Casualty doctors were also asked to fill in a one-sided form for each patient in the main study after the initial examination of the patient. The form was attached to the casualty card and consisted of questions asking for descriptions of signs and symptoms, initial diagnosis, and prescribed treatment.

The researcher briefed the doctors on a number of occasions and ensured that forms were being filled in correctly. The co-operation from the doctor was very good and, in all, forms were completed for 95 per cent of the cases

A further form was developed for collecting data from the clinical case notes after the visit. This form was structured. Data were collected on final diagnosis, treatment, tests and disposal by a doctor in collaboration with the field worker. In all 90.7 per cent of the cases had one of these forms filled in for them.

Response rate: Of the 637 patients sampled over the year Table 3.1 shows the different range of responses.

Table 3.1 Response rate and nature of non-response

	%	no.
Full interview completed	90.3	575
Partial interview completed	1.7	11
Mail questionnaire completed	0.6	4
Refused interview	4.1	26
No contact	3.1	20
Language problem	0.2	1
	100%	637

In 92.6% of the cases some information was collexted on the pathways taken to hospital by the patient. However, in 98.6% (n=628) of the sample some information was collected from the patient at the time of the visit to the hospital so this figure will be used as the base for the data analysis. Some information was also collected on the non respondents as it gives some indication as to their 'circumstances'. Of the refusals, 14 did not give an explanation. In many cases the types of condition that were presented led to the patient or person responsible for the patient to feel guilt or embarrassment because of the 'moral' nature of the condition. Thus an interview was refused. For example, one woman had been battered by her husband and didn't want to give information, one person took an overdose and refused to talk about it, two mothers refused because a 'child' was involved and two had'embarrassing' complaints that they did not wish to give details about how they occurred. Two patients said there was no point as they lived in London and details of their circumstances were irrelevant, and two were drunk and refused. One man had been on the survey before and said he saw no point in giving further information, and another was a porter who worked in the hospital and did not wish to give away any information to other members of the hospital staff.

In 12 of the no contacts no reason could be found for not tracing the patient. In six of the cases the patient had moved or left the area and an address could not be found. In one case the patient had no fixed abode and the other was unavailable for interview as he had been arrested by the police.

Thus, even amongst the group of non-respondents, over a third were involved in circumstances that might have influenced their choice of medical treatment. Particularly in cases where the patient feels his complaint will be 'morally'evaluated the anonymity of the accident centre may be important.

The Analysis

Data from the large sample was coded, processed and placed on computer tape ready for the analysis. Most of the questions were coded and the planned analysis for this part of the study is of a quantitative nature

The second part, the more in-depth study of 30-40 episodes; is qualitative and the analysis is based on transcripts from the tapes. Each case is written up individually and is compared with other cases in similar circumstances so as to build up a picture of the public offical or others position.

Summary

The major part of the study was carried out through a random sample of 637 new attenders at the Accident Centre at the Kent and Canterbury Hospital. The sampling ratio was 1:50 and the period of sample was continued for exactly a year. Overall, nearly 93% of the patients gave some data on the circumstances that led up to the episode and what influenced their choice of medical treatment. This response rate is very high given the long period of study and the type of population being sampled. A smaller more intensive study of 30-40 episodes selected from the main study was carried out by the interview with an emphasis on understanding the position of public officials, etc., in coping with matters of health in their official positions.

Chapter 4.

The background characteristics of the new attender at an Accident and Emergency Department.

In this first of four chapters which present the results from this study, the following question will be examined: What are the socio-demographic characteristics of the new attender and are they different to socio-demographic characteristics of new patient populations attending accident and emergency departments situated in different socio-environmental locations. The second part of the chapter examines the clinical case mix in terms of various medical classifications of "appropriateness" of attendance and compares medical assessments with lay assessments.

1. Socio-demographic characteristics of the new attender.

Table 4.1 shows both age differences and sex differences in attenders at the accident and emergency department. No directly comparable data are available for the catchment population of the hospital but data on age distribution are available for the population of Canterbury and East Kent. (see below Table 4.1). Unfortunately, the groupings of age are broad so that detailed comparisons are difficult. However, comparisons do suggest that for the age group 15-65, there was a high demand, for the age group 65+ the demand was low. In other studies elsewhere (N.P.H.T. 1960, Morgan et al 1974) the heaviest demand for services has come from school children and young adults and more specifically from young males. (Leeds (Western) Health District 1977). Given the limitations in the detail available on the background population it is difficult from this study to confirm or refute such a trend. However, these data do suggest that for those under fifteen years of age there was little difference between the percentage in the population and the percentage of patients who utilised the accident and emergency department. With regard to the proposition that the accident and emergency department has become the predominant source of professional medical care for the young male, evidence from this study shows 42.8% of the new patient population are aged between 15 and 35 and this age group accounts for 49.3% of males and 31.5% of female patient population. Certainly, more detailed information on background population is needed to test this proposition more accurately.

Table 4.2 shows that, in comparison with the social class distribution

for East Kent and Canterbury, no marked differences were found in the social class distribution for new attenders at the accident and emergency departments. This finding is similar to that found in other studies (Morgan et al. 1974).

Table 4.3 shows the distribution of new patients' economic activities. The implications of these data are difficult to estimate given the lack of comparative data for the background population although it is noticeable that only 7.5% of the new attenders were retired compared with 22.7% in the background. The results also suggest that the proportion of the school attending age may be more than would have been expected given their distribution in the background population.

In summary, the results suggest that the new attender at an accident and emergency department is more likely to be male than female, be young (excluding pre-school age) than old. These results are similar to those found in other studies.

2. The type and severity of complaint: the clinica- and lay viewpoints.

88.1% of patients had one complaint, 9.7% had two and 1.7% had three. Only two patients had four different complaints and one patient was not injured and had no ailment at all. Table 4.4 shows the distribution of complaints using the diagnostic classification developed by the N.P.H.T. (1960). This classification is used in this study because it was developed specifically for complaints presented at casualty departments. It also is useful for comparative purposes.

In a previous chapter evidence was presented which showed that the case mix at accident and emergency departments appears to be a function of their geographical and socio-environmental location. For instance in large cities the non-traumatic element in an accident and emergency department's caseload is higher than that found in a department situated in amore suburban or provincial location. An important feature of the accident and emergency department at the Kent and Canterbury is that it serves a semi-rural location and thus data will provide an interesting comparison with those from locations which serve predominantly urban industrial areas.

In London, recent studies of casualty departments have shown that just over half of the complaints presented by new patients are injuries of some kind. At the Middlesex, Wilkinson et al. (1977) found that 56.4% of new patients had injuries and at St. Bartholomew's, Cullinan (1979) found 54.5%

of new patients had an injury. This, in marked contrast to the 84.3% of attenders having injuries found in Newcastle (Morgan et al, 1974). This last figure is much nearer the percentage of new patients with traumatic complaints found in this Canterbury study (83%). Included in this definition of trauma are all ingestions of foreign bodies, musco-skeletal complaints and any type of poisoning. The N.P.H.T. study (1960) examined the diagnostic case mix for eight different hospitals. The traumatic element consisted of about 80% in four hospitals but wnet down to almost 55½ in two cases.

The evidence from this study suggests that the case mix of this accident and emergency department seems to fit the pattern of an accident and emergency department situated in a provincial location with a high proportion of the case-mix being of the "traumatic" type. Certainly, it doesn't seem to have the same kind of function as London Hospital departments which appear to be fulfilling the role of 'family doctor' for a group of the population. In Newcastle, with its high percentage of traumatic complaints, 15.7% were fractures, 8.5% were sprains, 27.0% were wounds and 24.6% were contusions. In Canterbury, Table 4 shows 12.1% were fractures, 11.6% were sprains, 27.2% were wounds and 16.8% were contusions. The only marked difference between these two case mixes seems to be that Canterbury has a lower percentage of contusions being presented at casualty. Whilst this may be due to the different patterns of morbidity between the areas it may also be due to the smaller casualty departments in the peripheral parts of East Kent managing to deal with more 'minor' complaints such as contusions, thereby reducing the need for patients to travel great distances through the rural environment to the accident centre.

Some authors (see Chapter 2) have suggested that a large proportion of the new attenders at accident and emergency departments are 'inappropriate' because their conditions are not serious or because they didn't require hospital treatment or urgent medical treatment. Obviously, definitions of appropriateness are functions of how the work of the department is defined. However, to overcome this pattern, in this study a number of different clinical classifications are used. One of the classifications used was a medical classification of the 'urgency' with which mendical attention was required.

The concept of urgency is used because it puts the emphasis on the speed with which professional medical treatment is required rather than

specialist treatment for specific complaints. Thus there is an implicit assumption in choosing medical urgency as that part of the work of an accident and emergency department is to deal with complaints that need quick treatment whether they are "serious" or not. Not only was a scale of medical urgency developed but an attempt was also made to build ingto this scale the uncertainities which confront the doctor in the diagnostic process. In the literature review it was pointed out that a major weakness with previous assessments of severity or urgency is that they have been made after clinical tests, treatment and final examinations had taken place. The difficulties involved in using this approach were outlined in a previous chapter and in this study an attempt was made to get round them by assessing the complaint at the time of initial examination. Casualty officers were asked to fill in a form directly after initial examination giving details of what the patient said was wrong, as well as the doctor's initial diagnosis and the clinical tests or treatment that were proposed. Originally, it was planned to get the casualty doctors to assess the urgency with which the patient required medical treatment. However, because the value of such an assessment proved to be problematic given the marked variation in the definition of urgency between casualty doctors, the assessment of clinical urgency was made by a casualty consultant basing his assessment on the details given in the form. The assessment is therefore crude in that the assessor could not see the patient himself thus not being able to use directly his clinical experience and that the assessment is based on other doctor's written interpretations. The assessment is based on the most probable diagnosis and urgency is dependent on the treatment available. The assessment also presumes that first-aid had been carried out where appropriate and when the assessor was in doubt he erred on the side of 'urgency'. The assessor carried out the assessment on two different occasions on each case. The second assessment being blind. The differences between the two assessments were very small. Table 4.5 shows the assessment of urgency as well as the distributions.

The results show that only 6% of the cases were described as 'life or death' situations where immediate intensive medical treatment was required. On the other hand, only 5% of the cases were described as not needing medical treatment until at least 48 hours after the trouble started. The large majority came into the two middle groups with 45.1% requiring medical treatment within 6 to 48 hours of onset and a slightly smaller group, 43.3% of the cases, requiring medical treatment within six hours of onset. Thus,

in broad terms, half of the cases should be described as urgent (requiring medical treatment within six hours of onset) and half could be described as non-urgent (not requiring medical treatment within six hours.

In other studies, the "appropriateness" of the condition for treatment at hospital was defined in terms both of the level of skill needed and of the facilities available to treat the condition. (Crombie 1959). Such an assessment was carried out in the N.P.H.T. study (1960) and the scale uses the diagnostic classification described previously in this chapter. In the N.P.H.T. study each diagnostic category was given a code according to whether hospital facilities or clinical "need" were required, general practitioner and/or hospital skills required, general practice facilities or clinical need required, nurse S.R.N. and/or G.P. required and finally nurse S.R.N. alone is necessary. (See N.P.H.T. 1960 study for further details). As the diagnostic classification used by the N.P.H.T. is also used in this study it is possible to use this 'clinical care' scale in this study. Using this scale the results show that 36.0% of the cases were said to be requiring hospital facilities or clinical need, 2.2% of the cases were said to require either hospital or G.P. skills, 36.7% of the cases were said to require general practice facilities or clinical need, 7.6% of the cases required a nurse or a G.P. and 12.5% of the cases required a nurse only. In a further 4.9% of the cases the complaint was not classifiable or no information was available. When these results are compared with the average presented in the N.P.H.T. study it appears that the Kent and Canterbury Accident department had a higher than average proportion of complaints specifically requiring hospital care and facilities, 36.0% as against 29.0%, and the percentage requiring G.P. care was much lower, 36.7% as against the N.P.H.T. average of 52%. Table 4.6 shows the disposal of patients after the initial visit to the department. Just over two-thirds were discharged requiring no further treatment. Only 4.5% were admitted to a ward and 4.3% to the bed area for observation.

A number of different medical indicators of the "appropriateness" have been described. What does the evidence suggest overall? According to the various approaches the percentage of legitimate attenders varied between a third and a half of the new attenders. If appropriateness was defined in terms of clinical urgency with which medical attention was required then 6% were 'emergencies' and another 43% were "urgent". If appropriateness is defined in terms of requirement for hospital facilities or clinical need then only 36% could be defined as appropriate. Finally, if appropriateness is

in terms of clinical seriousness which is indicated by use of medical services then only 32% required further medical treatment after the initial visit to casualty and only 4.5% were admitted as inpatient. It appears, then, whichever classification is used that, using these medical criteria, at the most a half of the new attenders could be defined as 'appropriate'.

If "appropriateness" is defined in terms of urgency with which medical attention is required or"seriousness" of the complaint, it may be of more value if these concepts are based on lay-evaluation for reasons that have been emphasised in Chapter 2. One method of identifying the seriousness of the complaint for the patient is to judge it in terms of its impact on the patient's everyday life. Table 4.7 shows the degree of restriction of activity that the individual suffered in terms of the days lost from work or school, the number of days in bed as a result of the complaint and the number of days activity was restricted. These data were collected at the time of interview which usually occurred within a week of the interview. Thus, they could be minimal estimates of restricted activity although where no restricted activity is reported this should be an accurate estimate. The results show that overall nearly two-thirds of the attenders had at least one day's restricted activity due to their complaint and a fifth had at least four days of restriction. 20% of the new attenders spent at least one day in bed as a result of their complaint. Over half those at work or at school lost at least one day of these activities respectively.

Now the difficulty with using this kind of data is that the seriousness of the condition is judged in terms of its subsequent e-fects on the sufferer's everyday life. It cannot take into account how the individual felt about it at the time when he was considering the need for professional medical treatment.

If "appropriateness" is classified in terms of "the urgency with which medical attention is required", that is the routine non-urgent cases should go to the family doctor and the urgent or emergency cases should go to the hospital, how many patients saw their complaint as being urgent or as an emergency?

There are a number of different ways of defining emergency or urgency. For the present purposes, however, the following will be used. Patients were asked if they would define the episode that they were involved in as emergency and if so why would they define it in this way. The results show (see Table 4.8) 58.8% of the patients saw the episode as an emergency and

32.8% did not. This figure of 58.8% (almost two-thirds of the respodents) is much higher than the figures based upon medical definitions where the highest proportion of cases defined as 'urgent' was 50%. Now this suggests that either lay-people use completely different criteria for defining the category 'emergency' or they use similar criteria but interpret them in a different way. Judging from the reasons given by patients for defining the episode as an 'emergency' the latter type of explanation seems to be more convincing. Apart from the small percentage who identified what can be classified as a 'social dimension', that is "any episode involving a child", 2.4%or "other people told them it was an emergency", 3.7% the majority used their 'medical' knowledge to define 'emergency'. These data seem to suggest that lay-people have stereotypes about certain types of complaint being of an emergent nature. For instance, a suspected broken bone, an open wound, a head injury and a collapse. Whilst most lay-people do not have detailed medical knowledge their data do suggest that they have a set of categories which using their medical knowledge they define as 'emergencies'. Other lay categories of emergency were when the patient was 'uncertain' what was wrong, (6.1%).

The explanatory power of this concept in terms of patients' choice of medical care system will be discussed in later chapters. However, these data do show that the category 'emergency' is defined by lay-people predominantly in 'medical' terms but these terms are more general and more varied and appear to hold a different significance or importance for lay-people than for the medical profession. This has implications for the use of this category in health education propaganda which attempt to deter the patient from using the hospital or contacting their doctor out of hours for "non-emergencies".

Summary

The results have shown that the typical attender at the accident and emergency department is the young male. This finding supports evidence from other studies in other areas. In terms of the case mix, new attenders at the Kent and Canterbury accident and emergency department present predominantly traumatic conditions which appears to be typical for an accident and emergency department in a provincial location although differs markedly from the case mix found in departments situated in inner metropolitan areas.

Using medical classifications only, a maximum of 50% of the patients could be classified as 'appropriate' whereas almost two-thirds of the patients defined

the 'episodes' that they were involved in as 'emergencies'. These lay definitions were based mainly on lay health knowledge rather than a more 'social' dimension.

Table 4.1: Age and sex distribution of new patients attending the accident and emergency department K. & C.

Age groupings	Males		Females		Total	
	No.	%	No.	%	No.	%
< 5	28	7.1	18	7.7	46	7.3
5 < 10	24	6.1	28	11.9	52	8.3
10 < 15	33	8.4	13	5.5	46	7.3
15 < 20	56	14.2	26	11.1	82	13.1
20 < 25	51	13.0	11	4.7	62	9.9
25 < 30	52	13.2	17	7.2	69	11.0
30 < 35	35	8.9	20	8.5	55	8.8
35 < 40	19	4.8	7	3.0	26	4.1
40 < 45	12	3.1	6	2.6	18	2.9
45 < 50	12	3.1	3	1.3	15	2.4
50 < 55	5	1.3	12	5.1	17	2.7
55 < 60	12	3.1	12	5.1	24	3.8
60 < 65	5	1.3	8	3.4	13	2.1
65 < 70	9	2.3	9	3.8	18	2.9
70 < 75	4	1.0	10	4.3	18	2.2
75 +	10	2.5	17	7.2	27	4.3
No information	31	7.9	18	7.7	49	7.8
Total	393	100%	235	100%	628	100%

Age distribution of population of Canterbury and East Kent, 1971

Age groups	Canterbury		East Kent		Study	
	No.	%	No.	%	No.	%
Under 5 yrs.	7315	6.6	42930	7.3	46	7.3
5-15	16520	15.0	94705	16.2	98	15.6
16-64 M 16-60 F	58770	53.4	315485	53.3	374	60.8
65 + over M 60 + over F	27520	25.0	132850	22.7	59	9.4
No information					51	8.1
All ages	110130	100%	585965	100%	628	100%

Table 4.2: Social class distribution of new patients attending the accident and emergency department, K. & C. and social class distribution of population in Canterbury and East Kent

Social class classification 1971	Study		Canterbury Economically active males aged 15 and over and social class 1971		East Kent Economically active males aged 15 and over and social class 1971	
	No.	%	No.	%	No.	%
Sc1	31	4.9	1820	6.7	6840	4.4
Sc2	119	18.9	5820	21.4	30140	19.4
Sc3 nm	53	8.4	3090	11.3	15990	10.3
Sc3 m	195	31.1	9960	36.6	58750	37.9
Sc4	99	15.8	4400	16.1	27800	17.9
Sc5	19	3.0	1630	6.0	10540	6.8
Other	13	2.1	530	2.0	5060	3.3
No Information	99	15.8				
Total	628	100%	27250	100%	155120	100%

Table 4.3: Economic activity of distribution of new patients attending the accident and emergency department, K. & C.

Economic activity of patient	No.	%
Child under five years	47	7.5
Attending school or college	136	21.7
In employment - full-time	265	42.2
In employment - part-time	21	3.3
Housewife	43	6.8
Retired	47	7.5
Disabled	2	0.3
Unemployed	14	2.2
Other	4	0.6
No information	49	7.8
Total	628	100%

Table 4.4: Diagnostic classification of patient's complaints.
Diagnostic classification is taken from the N.P.H.T. national study 1960

Diagnostic classification		1st complaint		2nd complaint		3rd complaint		4th complaint	
		No.	%	No.	%	No.	%	No.	%
Fractures skull and face and/or concussion	H	9	1.6						
Fracture spine or multiple	H	3	0.5						
Fracture ribs or clavicle	H	8	1.4						
Fractures - Colles, Carpus, Metacarpals in Phalanges Hand	H	11	1.9						
Fractures other, upper limb	H	19	3.3	1					
Fractures - Potts, Tarsus, Metatarsus or toes.	H	6	1.0						
Fractures - Other lower limb or pelvis	H	14	2.4						
Dislocations (any site)	H	5	0.9						
Ligamentous injury (sprain/strain) upper limb	H	17	2.9	1					
Ligamentous injury (sprain/strain) lower limb	H	50	8.7						
Rheumatism	P	1	0.2						
Laceration/open wound/Penetrating injury requiring cleaning and dressing only	N	72	12.5	9					
Laceration etc. requiring up to 2 sutures or A.T.S. or systemic chemotherapy	P	59	10.2	5					
Laceration etc. requiring formal toilet, repair or exploration	H	26	4.5	3				1	
Contusion or bruise - skull, face or trunk	P	40	6.9	23		3			
Contusion or bruise - limbs	P	57	9.9	10		1			
Infection Areolar Tissue - Paronychia or ingrowing toenail	P	5	0.9						
I.A.T. - Other infections - limbs	P	4	0.7	1					
I.A.T. - Other infections - head, neck, trunk	P	4	0.7	1					
Burn or scald - under 4% body surface	N-P	14	2.4						
Burn or scald - over 4% body surface	H	2	0.3						
Bite or sting	N-P	5	0.9						
Other skin disease	P	2	0.3						
E.N.T.-F.B. or suspect F.B. nose or ear	H	4	0.7						
E.N.T. Epistaxis	H	3	0.5	1					

continued.....

Table 4.4 (contd.)

Diagnostic classification		1st complaint No.	1st complaint %	2nd complaint No.	2nd complaint %	3rd complaint No.	3rd complaint %	4th complaint No.	4th complaint %
E.N.T. - all other	P	9	1.6	3		3			
Eye - F.B. or suspect F.B. or abrasion from F.B.	N-P	25	4.3	1					
Eye - all other	P-H	13	2.2			2			
Swallowed or inhaled F.B.	H	6	1.0	1					
Poisoning (suicidal or otherwise) Drunk	H	10	1.7	1					
Epilepsy/C.N.S. Vascular lesions	H	2	0.3	2					
Acute Respiratory Disease	P	5	0.9					1	
Acute Intra Abdominal Disease	H	11	1.9						
Obstetric/Gynaecological Acute retention	H	3	0.5						
Other medical or surgical	P	10	1.7						
Dental	P	2	0.3	1		2			
Unclassified	P	13	2.2						
Symptoms N.A.D.	P	1	0.2						
Ligamentous neck or back		11	1.9	2					
Callapse or dizziness		8	1.4	1					
Coronary		1	0.2						
F.B. in other part of body		7	1.2						
No information		1	0.2						
Total*		578	100%	67		11		2	

* These data are derived from hospital records.
Information is only available for 578 of the 637 patients

H = Hospital facilities or clinical need required

P-H = General practitioner and/or hospital skills required

P = General practice facilities or clinical need required

N-P = Nurse S.R.N. and/or G.P.

N = Nurse S.R.N. alone necessary

Table 4.5 Clinical assessment of urgency with which the patient's condition required medical treatment. Assessment based on data collected at initial examination of patient

Clinical assessment of urgency of patient's condition	No.	%
Emergency - Immediate medical treatment required	36	6.0
Urgent - Medical treatment required within 6 hours of trouble starting	261	43.3
Medical treatment required within 6 to 48 hrs.	272	45.1
Non-urgent - Medical treatment could wait until 48 hrs. or more after trouble started	30	5.0
Total	599	
Brought in dead	4	
	*603	

* These data are derived from forms completed by the casualty officer. In all 603 out of 637 were completed.

Table 4.6 Distribution of disposal of new patients after first attendance at the accident and emergency department

Disposal of patient	No.	%
Discharged - letter to G.P.	300	51.9
Discharged - no letter to G.P.	52	9.0
Discharged - G.P. to continue treatment	8	1.4
Referred to fracture clinic	34	5.9
Referred to out-patient department	38	6.6
Transferred to other hospital	1	0.2
To return to the hospital definitely	42	7.3
Admitted to the bed area	25	4.3
Admitted to a ward	26	4.5
Brought in dead	4	0.7
No information	48	8.3
Total	578*	100%

* Data collected from hospital records

Table 4.7 Social and economic impact of complaint on patient's life

Number	No.of days in bed as a result of complaint (inc.inp.)		No.of days lost from work		No.of days lost from school		No.of days activity restricted	
	No.	%	No.	%	No.	%	No.	%
None	445	70.9	169	45.9	79	42.5	201	32.0
One	69	11.0	52	14.1	23	12.4	81	12.9
Two	22	3.5	29	7.9	9	4.8	65	10.4
Three	10	1.6	24	6.5	7	3.8	64	10.2
Four	8	1.3	10	2.7	3	1.6	43	6.8
Five	3	0.5	8	2.2	6	3.2	27	4.3
Six	3	0.5	3	0.8	1	0.5	16	2.5
7+	6	1.0	16	4.3	3	1.6	44	7.0
No information	62	9.9	57	15.5	55	29.6	87	13.9
Total	628	100%	368	100%	186	100%	628	100%
Not applicable	-		260		442			
Total			628		628			

Table 4.8 Patient's perception of the 'episode' as an 'emergency'

Patient's definition of an 'emergency'	No.	%
Patients who didn't see the episode as an 'emergency'	206	32.8
Patients who did see the event as an emergency and why:		
Other people told them it was an emergency	23	3.7
Didnt' know what was wrong	38	6.1
Suspected broke a bone	50	8.0
Painful	48	7.6
Collapse	22	3.5
Medically serious	29	4.6
Head injury	21	3.3
Open wound	31	4.9
Certain medical treatment needed	25	4.0
'Episode' involved a child	15	2.4
Other	57	9.1
No information	53	8.4
Total	628	100%

Chapter 5

Pathways to the accident and emergency department

The major question that will be examined in this chapter is as follows:

What are the most common pathways that new patients follow to get to the accident and emergency department? Before this question is examined a brief description of some of the features of the 'episode' itself is needed. This will be followed by a detailed analysis of the pathways. The third and final section of this chapter will focus on patient orientation towards health care.

1. Socio-environmental characteristics of the 'episode'

The peak hours for episodes occurring appear to be in the late morning and in the middle of the afternoon (see Table 51). Thursday, Saturday and Sunday respectively were the days of the week when the episodes were most frequent. This contrasts with the figures for attendance at the hospital department which show Monday and Saturday as the days when the highest attendances occur.

There are two different dimensions of the location of the 'episode' which need to be described. First, there is the actual geographical location of the episode and its relation to the patient's home address. Table 5.2 shows the distribution of 'episodes' by the geographical of the 'episode' and the geographical position of the patient's address if different from where the 'episode' happens. The results show 44.1% of the 'episodes' occur in and around the Canterbury area whereas only 40.0% of the patients live in the Canterbury area. 14.3% of 'episodes' occurred in Herne Bay, Whitstable or Faversham areas and 16.1% of patients lived in these areas. 8.1% and 8.6% of 'episodes' occurred in Dover and Folkestone respectively. Only 3.5% of the 'episodes' happened outside the Kent area and another 4.5% occurred in Kent but not in East or South-East Kent. In contrast, 10.0% of patients lived outside Kent and another 3.7% lived in other parts of Kent than East and South East of the county. These data suggest that the majority of 'episodes' occur in the East Kent area with the highest proportion of these occurring in Canterbury. The vast majority of patients utilising the accident and emergency department live in the East Kent area but over 13% come from outside Kent or other parts of Kent.

The vast majority of people who were not permanent residents in the East Kent area were either on holiday or working in the area. The majority

of both of these two groups were spending more than one day in the area. (see Table 5.3). Only a small proportion were travelling through the area.

Secondly, there is the socio-environmental location of the peisode.

Table 5.4 shows the distribution of different locations of the 'episode'. Just under two-thirds of the 'episode' happened outside a private home. 'Episodes' which happened on the road or street accounted for 16.4% and episodes happening in another place utilised by the general publis such as on a harbour, in a shop, in a park or other recreation area or on a camp site accounted for 15.5%. 'Episodes' occurring at work and school accounted for 17.3%. Thus these data indicate that the majority of 'episodes' which led to utilisation of the accident and emergency department occurred in locations which could loosely be termed 'public' where a section of the general public have access.

13.3% of the patients developed signs of symptoms of illness. Table 5.5 shows the distribution of these signs or symptoms as reported by the patient. In the remainder of the cases, 78.8%, where information was available the patient was involved in an episode which led to a traumatic condition of some kind. In these cases there were specific activities which appear to lead to the injury occurring. Table 5.6 gives the distribution of those activities. The results show that the large majority of traumatic complaints appeared to be accidental in nature and the majority of these were due to the sufferer falling or being struck by objects of some kind. The proportion involving deliberate violence was small (3.8%) and so was the number of sufferers who inflicted the injury on themselves.

In some instances the sufferer was not the only person involved in the episode and people other than the sufferer were hurt. Table 5.7 shows that in 11.9% of the episodes two or more people were involved and 66 of those 75 people suffered an injury of some kind. Even though the majority of patients were involved in the episode by themselves many of them were not alone when the episode happened (see Table 5.8). Just over two-thirds of the patients reported that they were with one other person at least when the episode happened.

From these data presented in this section it is possible to gain some general idea of when and where the episode happened and the type of episode involved. However, the pisture is fragmented and in the following section

the various pathways followed by different groups of patients from the onset of the episode to arrival at the hospital will be described in detail.

2. The pathways that the patient followed to get to the accident and emergency department

Figure 5.1 shows the various routes that the patients follow to the accident and emergency department. In this section it is the intention to outline the routes in detail including explanations given by the patient of why they acted in certain ways.

The figure begins with the socio-environmental location in which the episode occurred. It was felt that the socio-environmental location would influence a number of other characteristics surrounding the episode such as the number and the status of the people involved in the decision-taking process. The location was divided up into two. Whether the episode occurred in the patient's own home or not.

In the previous section other characteristics of the episode were described which may have been equally as important in explaining the pathway adopted by the patient such as whether the patient was alone or not when it happened, or whether the episode occurred in a rural or urban setting. However, as at this stage this is only an attempt to present a descriptive picture of the pathways, then these other factors will be included in the analysis which is presented in the next chapter which attempts to examine the factors associated with choice of medical care system.

The figure shows that 63.2% of the patients were involved in an episode which occurred outside their own home and 29.8% of the patients were involved in an episode occurring at home.

The next stage which is portrayed in the figure is whether or not the decision to seek medical care was made as soon as was possible after the onset of the peisode. Overall, 46.3% of the patients made the decision to seek medical care as soon as possible and 51.2% of the patients said they didn't. Table 5.9 shows the reasons given by patients why they didn't contact the medical services as soon as possible after the onset of the episode and by place of onset of episode. The most common reason given by patients was that their complaint wasn't serious enough. This was true for episodes that occurred at home and outside the home. The other most common reason given

was that the patient thought that the condition would improve. Clearly, patients predominantly gave reasons for not going to the medical services as soon as possible after the onset of the episode which emphasised the 'medical' significance of the complaint.

The group who said they contacted the medical services as soon as was possible were asked whether they could have put off contacting the medical services until a day after they actually did. Table 5.10 shows the distribution of these responses and location of episode. Of this group only 10.5% said that they could have put off contacting the medical services until the following day and a larger proportion of this group were those involved in episodes outside the home. The most common reason given by this group was that the decision to seek medical care was taken out of their hands and therefore they had no choice in the matter. For the group who said that they couldn't have put off contacting the medical services where the episode occurred in the home the most common reasons given were that their complaint was too painful to wait or that it was a deep cut and they were losing a lot of blood. In contrast, where the episode occurred outside the home the most common reason given by patients was that they were told to go by other people and they had no choice in the matter. This is interesting because it highlights the significant part 'others' play in influencing patients' decisions particularly when the episode occurs outside the home environment.

Overall, then, 15.3% of the patients had an episode at home and the decision to seek medical care was made as soon as possible after the episode. Another 14.8% of the patients had the episode at home but delayed in making a decision. 33.1% of the patients were involved in an episode outside the home and made the decision to contact the medical services as soon as was possible and, finally, 30.1% of the patients were involved in an episode outside the home and the decision to seek medical care was delayed.

The implication of these findings, particularly where the episode occurred outside the home and the decision to seek medical care is delayed, is that a proportion of these decisions were made in socio-environmental locations other than that where the original episode occurred. Table 5.11 shows the site of decision to seek medical care and whether it was made at the site of the episode. Over the whole sample (n=628) 30.2% of the cases involved decision to seek medical care being made at a location other than at the site of the episode. In the vast majority of these cases the decision was made in the home.

In fig. 5.1 this concept has been translated into the question, 'Was the decision to seek medical care made in the patient's own home? This figure shows the proportions of patients who have followed various routes up to this final stage and the most common pathway appears to be where the episode occurred outside the home, the decision to seek medical care was made as soon as was possible after the episode and the decision to seek medical services was made outside the home. This group accounted for 29.3% of the whole sample.

The general picture generated by the data so far is that in a large proportion of the cases patients were in contact with the medical services shortly after the episode occurred. Table 5.12 shows the distribution of the length of time between the trouble starting or the episode occurring and an attempt being made to contact the medical services. In 45.7% of all the cases the decision to seek medical care was made within an hour of the onset of the episode and in a further 15.7% cases a decision to seek medical care was made within six hours of the onset of the episode.

Apart from where and when the decision to seek medical care is made another important question is who was involved in the decision-taking process. Table 5.13 shows the range of contacts with patients during the course of the decision-taking process. Some patients had contact with more than one person but these patients constituted only a small proportion of the total. Table 5.13 shows only the first contact. 1.4% of the patients were described as 'unconscious' at the time of the decision-taking process and obviously had no contact with anyone. A further 18.1% reported having no contact with anyone. A further 18.1% reported having no contact with anyone during the decision-taking process. The remaining 80.5% of the patients reported having contact with at least one person. The most frequent contacts were with parents or spouses (17.8%), and friends or neighbours (14.5%). 16.9% of the patients reported have formal contacts such as contacts with the police, employers, teachers and others with some medical knowledge such as off-duty nurses or members of the St. John's Ambulance. In a further 6.4% of the cases contacts were reported with atrangers and bystanders and 4.1% involved contacts with workmates. Overall, four-fifths of the patients had a contact with at least one person about their injury or illness and the majority of these contacts were of the informal kind although not necessarily involving relatives. The nature of the advice given was varied in terms of the strength with which it was given and also in terms of its impact on the patients' decision-making. For example, of the contacts with strangers, 10.0% advised contacting an ambulance. However,

not only was advice given but the decision sometimes was made by the other person in that many bystanders/strangers called for ambulances. This will be discussed when the results from Table 5.14 are presented. However, for the majority of patients, contact with another person took the form of information or advice given. The nature of the advice varied according to the person in contact with the sufferer. For example, very few people suggested contacting a G.P. and if such advice was given it most frequently came from parents/spouses or techer/employers and workmates. The police and strangers never offered this kind of advice and the police predominantly told patients to go to the accident and emergency departments. Policemen, teacher/employers and other persons medically qualified were more likely to give some advice than relatives, friends or strangers but this may be because the patient specifically asked for advice.

In figure 5.1 this concept of who gave advice or information to the patient after the episode occurred was translated into the question, 'Did the patient receive information or advice from his relatives only? The figure shows that up to this fourth stage by far the most common pathway followed by the patients was where the episode occurred outside the home, the decision to seek medical care was made as quickly as possible and it was made outside the patient's home and advice was given by a person who was not a relative. This group accounted for 23.6% of the whole sample. The next most common pathway had exactly the same features as the previous group apart from the decision to seek medical care being delayed. This group accounted for 13.1% of the overall sample.

Not only were patients given advice or information by other people but in some cases the decision to seek medical care was made by people other than the patient. Now this can be a matter of routine in that parents may always make decisions about matters of health when it concerns their dependents and it also can reflect the circumstantial element identified by the C.S.A. when non-family members are involved. Table 5.14 shows the distribution of persons who made the decisions to contact the medical services. In almost two-thirds of the cases the decision to seek medical care was made either by the patient, his or her relatives or the decision was a joint one between patient and his or her relatives. Of the remaining 27% the most common decision-takers were employers or teachers (6.7%), friends (4.9%), strangers or bystanders (3.3%) and people with training in first-aid (3.7%). The implication of these results are that in about a quarter of the cases patients went to the medical services either voluntarily or involuntarily based on the decision of a person who it can be

assumed is not usually involved in their routine everyday decision-taking for matters concerning health. Returning to the figure 5.1, this fifth stage involves the question, 'Was the decision to seek medical care made by the patient or patient's relatives? The figure shows the proportion of patients who followed the wide range of pathways up to and including the fifth stage. It is interesting to note that even by this stage patients have followed twenty-nine different routes. The most common pathways are those where the episode occurred outside the home, the decision to seek medical care was made as soon as possible outside the home and it was made by a person other than the patient or patient's family. This group accounted for 14.7% of the overall sample. Other common pathways are those where the episode occurred in the home, the decision to seek medical care was made as soon as possible in the home and it was made by the patient or his or her relatives. If this group is grouped with those who had a similar pathway but received advice from a person other than a relative then together they account for 12.1% of the whole sample.

Up to now in this section a distinction has been made between site of the 'episode' and site of the decision to seek medical care, and also between the person who gave advice and the person who was reported as having made the decision to seek medical care. Whilst these distinctions have been made for the purposes of the analysis they are in reality more blurred, given that decision-making is a process and that it is not only difficult to identify at what exact point a decision is made or taken but it is also difficult to identify who made the decision. It must be remembered that, when identifying decision-takers, patients may be influenced by what they feel is a rational or sensible answer and be unwilling to present a position of uncertainty. For example, patients may feel it is more socially acceptable to say that the decision was taken by themselves than by friends, neighbours or relatives as it might appear to be more rational in that the patient is seen to be in control of his own decisions about matters of health. On the other hand, if the patient felt that the interviewer on the study was evaluating his behaviour in terms of whether it was morally justifiable to go to the hospital for this complaint, then he may have been more likely to put the responsibility for referral on the shoulder of an "expert" or an official.

So far the characteristics that have been identified in the pathways have been when and where the decision to seek medical care has been made and who has made it. At this next stage the decision to seek medical care itself is divided into whether this took the form of an attempt to contact a general

practitioner or not and whether that attempt was successful or not. In this study only 3.8% of the patients said they were not registered with a G.P. of whom 2.7% were permanent residents of the locality and 1.1% were not. This figure is low compared with results found in some other studies, particularly those carried out on accident and emergency department attenders in London. Wilkinson et al (1977) showed that at least 16% of first attenders were not registered with a G.P. and another 5%, though registered with a G.P., had moved too far away to continue seeing him. Cullinan (1979) found 8% without a G.P. In Newcastle, Morgan found only 1.3% without a G.P. and Cartwright's national study (1967) found 1%.

In Chapter 2 it was shown that many authors have been concerned about the number of patients who are self-referred. It appears that for some authors the only legitimate attender is the patient referred by their G.P., and many studies have therefore set out to identify the proportion of self-referrals and G.P. referrals in the case load of an accident and emergency department. Unfortunately, there has been little uniformity in definitions, and comparison has proved difficult. In this study the main concern has been to look at some of the influences on the patient's decision to go to an accident and emergency department as opposed to a G.P. Thus, a distinction is made between those who attempted to contact a G.P. and those who did not.

Overall, 26% of the patients reported an attempt to contact a G.P. and 65.8% said they did not attempt to contact a G.P. The sixth and seventh stages are incorporated into one in fig. 5.1 and translated into the question was the attempt to contact a G.P. successful? By this sixth stage patients have followed fifty different routes. The most common being where the episode occurred outside the home of the patient, the decision was made as quickly as possible outside the home and by a person other than a patient and no attempt was made to contact a G.P. (12.8%). Some of the other larger groups are those where the characteristics are similar to the former apart from the decision being made by the patient or patient's relative (7.6%). It is also interesting to note that of the group who were involved in an episode in their home, made the decision as quickly as possible at home and the decision itself being made by the patient or patient's relative, less than a half attempted to contact their G.P. Of this group of 76, 42.1% made an attempt to contact a G.P.

All those patients who said that they didn't attempt to contact a G.P.

were asked why they didn't (see Table 5.15). 14.5% of the patients said that they had thought about contacting their G.P. and 80.6% said that they hadn't. Just over a quarter of the patients suggested that even if the G.P. was an appropriate alternative course of medical care in their particular case they believed him to be unavailable or inaccessible. Others suggested that the G.P. was the inappropriate source of care in their case anyway. One group emphasized that their G.P. wouldn't have treated them either because he didn't have the time or the specialist facilities. This group, in all, accounted for 22.5% of the patients. Another group emphasised the urgency with which they required medical treatment and the G.P. wasn't quick enough (4.8%). Another group suggested that taking their condition to their G.P. would be wasting their doctors' valuable time as their complaints were too trivial (5.6%). Finally, one group emphasised the more positive side to hospital care such as the availability of facilities etc. (7.5%) and the convenience aspect (1.9%). In Chapter 2, patients' explanations for self-referral taken from two other studies were discussed. In the Newcastle study the availability of hospital care accounted for 32% of patients' explanations and the accessibility of hospital care accounted for 13%. In Michigan the 'availability' explanation accounted for 43% of patients. In this study, compared with others, more of the patients suggested that they had specific ideas about the suitability of conditions for going to the G.P. and the hospital.

Although 26% of the sample reported an attempt to contact a G.P. this does not necessarily imply that their attempts were successful. In fact, as Table 5.16 indicates, in six cases patients reported having no contact with the surgery at all. The Table also shows, at the initial contact 8.0% spoke to their G.P. and 2.2% spoke to their G.P.'s partner. 8.0% spoke with their practice receptionist. 86.5% of the initial attempts to contact (N=163) were made by the patient or patient's relative. Only 4.9% of the attempts were made by officials. The method of contacting the G.P. was predominantly by telephone (59.5% N=163) or by attendance at the surgery (31.3%).

What were the patients told when they contacted the surgery? Table 5.17 shows what patients were told on initial contact with the surgery. The results clearly show that the majority were referred to hospital. Now this table shows why they were referred to hospital by or who gave the information. Table 5.18 shows how many patients actually were successful in consulting a G.P. Successful is defined in terms of if they spoke to or saw a G.P. which includes their own doctor's partners or other G.Ps. Of the group of patients

who attempted to contact their G.P.

who attempted to contact their G.P. and were successful in contacting the surgery (=157) 45.2% actually saw their G.P. or other doctor and a further 9.6% spoke to the doctor on the telephone and were referred to hospital. In addition 2.5% of the patients spoke to their doctor on the telephone and were given advice other than to go directly to hospital and a further 2.5% attended the surgery and the doctor's nurse relayed information to the patient without the patient seeing the doctor. Therefore, of the 163 patients who attempted to contact their G.P. 59.8% had some success, however indirect, in contacting him or another doctor. Now translating this figure in terms of the whole sample, the results show that 26% of the whole sample attempted to contact a G.P. and only 15% of the whole sample (N=628) actually had some contact with a G.P. before going to the hospital. This latter group were defined as the 'successful' contacts and this was translated in Fig.5.1 into the question, 'Was the attempt to contact the G.P. successful?' As this question didn't apply to those who didn't attempt to contact a G.P. the most common pathways identified by this seventh stage are little different from those at the sixth stage. Interestingly, in the group where the episode and the decision to seek medical care was made in the patient's own home and the decision was made as quickly as possible by the patient or patient's relative and an attempt was made to go to a G.P., only 18 of the 26 patients who made attempts to contact their G.P. were actually successful.

The final two stages of the pathway refer to the nature of the transport used by the patient to reach the hospital, i.e. if the patient went by ambulance or not and if the patient went to another casualty before going to the K. and C. accident centre.

With regard to the transport utilised by aptients for going to a hospital the majority of patients used private transport which belonged to themselves, family, friends or neighbours (57.3). However, almost a fifth went by ambulance (see Table 5.19) which appears to a high proportion. Table 5.20 shows who called for the ambulance and shows the most frequent callers were bystanders. Furth r discussion of this particular finding will be presented in Chapter 7 but it does tend to highlight once again the significance of 'other' people in the decision-taking process. In Figure 5.1 the question has been phrased, 'Did the patient use an ambulance to get to hospital?' By this eighth stage, overall, patients have followed ninety-two different pathways. By this stage there are three different pathways which appear to be the most common although it must be emphasised that between them

they account for only 18.0% of the whole sample. These three pathways are as follows.

1. The episode occurs outside the home, the decision is made as soon as possible after the episode has occurred outside the patient's own home by a person other than the patient or patient's relative. No attempt is made to contact a G.P. but an ambulance is called. This group accounted for 7.0% of the whole sample.

2. The second group has all the characteristics of the first group apart from an ambulance not being called (5.9%).

3. The third group has all the characteristics of the second group apart from the decision to seek medical care being made by the patient or patient's relative (5.7%).

The final stage, the ninth stage, involves whether the patient went to another casualty department before attending the Accident Centre at the Kent and Canterbury Hospital. 6.4% of the patients went to another casualty department before going to the K. and C. and 86.1% went direct to the accident centre at the Kent and Canterbury hospital. In Fig.5.1 this ninth stage is incorporated into the pathway by the question, 'Did the patient go to another casualty before going to the K. and C. A.E.D.?'

It is now possible to pinpoint the most common pathways followed by patients attending the accident and emergency department. The purpose of this analysis was to give a detailed picture of how people got to the accident centre, where they came from, and who was involved in referring them. The question of why such paths were followed will be examined in Chapter 7. It was hoped that this detailed picture of the pathways which patients followed would shed some light on how complex and veried the circumstan ces are which lead to utilisation of the accident and emergency department.

It is clear from the results presented in Fig. 5.1 that the pathways patients followed to the accident and emergency department are complex and markedly varied. By the time the patients reached the hospital they had followed 144 different routes. Despite this multiplicity of pathways it was possible to identify major groups of patients who had followed similar routes. These were the most common pathways ranked in order of their size:-

1. Site of episode outside home, Decision made as quickly as possible, Site of decision outside home, No information given by relative, Decision made by non-relative, No attempt to contact a G.P., Ambulance called and taken straight to A.E.D. - 7.0% (N=628)

2. Site of episode outside home, Decision made as quickly as possible, Site of decision outside home, No information given by relative, Decision made by non-relative, No attempt to contact a G.P., Did not call ambulance and went direct to A.E.D. - 5.6%

3. Site of episode outside home, Decision delayed, Site of decision at home, Information given by relative and decision made by relative or patient, No attempt to contact a G.P., Ambulance not called and went direct to A.E.D. - 4.9%

4. Site of episode outside home, Decision delayed, Site of decision outside home, No information given by relative, Decision made by relative or patient, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 4.9%

5. Site of episode outside home, Decision made as quickly as possible, Site of decision outside home, No information given by relative, Decision made by patient or relative, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 4.9%

6. Site of episode outside home, Decision delayed, Site of decision outside home, No information given by relative, Decision made by non-relative, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 4.0%

7. Site of episode at home, Decision delayed, Site of decision at home, Information given by relative and decision made by relative or patient, No attempt to contact a G.P., No ambulance called and went direct to A A.E.D. - 2.9%

8. Site of episode at home, Decision delayed, Site of decision at home, No information given by relative but decision made by patient or relative, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 2.7%

9. Site of episode at home, Decision made as soon as possible, Site of decision at home. Information given by relative and decision made by relative or patient, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 2.5%

10. Site of episode at home, Decision made as soon as possible, Site of decision at home, No information given by relative but decision made by patient or relative, No attempt to contact a G.P., No ambulance called and went direct to A.E.D. - 2.4%

The above were the ten most common pathways followed by patients going to the Accident and Emerg ncy Department. In all, they account for 41.8% of the whole sample (N=628).

3. Patient orientation towards health care

The need to take seriously the patient's viewpoint was emphasised in explaining illness action and helpseeking behaviour. Therefore some data were collected in this study on patients' orientation to the medical care system. Two types of data were collected. First questions were asked about the patient's source of medical help or advice for routine matters of health and if that person or agency was not available to whom or where they would turn. In addition, questions were asked about patients preferences when they needed medical treatment and explanations for their preference. Secondly, data were collected on patients' responses to hypothetical questions about their help-seeking behaviour when faced with specific medical complaints. In addition, hypothetical questions were asked about what patients expected their general practitioners to do when confronted with various types of complaints. Similar questions have been asked in other studies and the answers are compared with answers given in these other studies.

Whilst both these types of data provide for useful comparison with other patient populations, their significance in explaining patient action is difficult to estimate given both the retrospective nature of the response and also the involvement of 'others' in the decision-taking process. However, with regard to the latter point, many patients or patients' representatives (52.9%) did make the decisions to seek medical care and it is believed the answers to these questions will give some clues as to what

sort of ideas patients take into account when they make decisions about use of services.

In the C.S.A.'s proposition, one of the assumptions appears to have been that patients use their general practitioner for routine medical matters. In this study patients were asked, "Who or where they would turn to when they need medical help or advice?" and "If this source of medical help is not available where do they go?" In response to the first question (see Table 5.21) only 2.3% of the patients said that they would go to an accident department for help, whereas 58.4% said that they would go to a G.P. This evidence seems to support what appears to be an assumption implicit in the C.S.A.'s proposition. However, it is interesting to note that 13.2% suggested 'other' alternatives. The majority of these going to relations or friends or neighbours suggesting that at least a small group of the patient population still consult a lay advice network before deciding to utilise official health services. A further 2% of the patients said they didn't have anybody or anywhere to turn to for medical advice and half of them said they would possibly go to a G.P. and half said they would go to the accident centre. Similar questions were asked in a study carried out on a random sample of attenders at a London Hospital Accident and Emergency Department (Cullinan 1979). A larger proportion, 8%, said they didn't have anyone or anywhere to turn to for medical advice and the majority of these would go to the nearest hospital. One of these people said he was never ill so didn't ever need any help. However, the vast majority (76.4%) did say that they had someone or somewhere to turn to. 46.2% turned to their G.Ps. and 3.5% said that they would use the accident and emergency department. A further 11% said that they would use the medical facilities at their work which includes the works' doctor or nurse. Overall 6% of the patients attending the London hospital said that they would utilise the accident and emergency department when they needed medical help (addition of those with A.E.D. as focus for medical help and those who utilise A.E.D. although do not have a focus) compared with 3.1% of patients attending at the Kent and Canterbury Accident and Emergency Department. Of equal interest is that less of the attenders at the London Hospital depend on their G.P. for help than in Canterbury but more of the London attenders depend upon occupational health facilities.

These differences are further highlighted when the answers to the second question, "If medical help is not available where does the patient turn?" are considered. For 35.5% of the patients in the Canterbury study the accident

department if the second source of medical help but in London almost 50% said they would turn to the accident department. In both studies the majority of patients said that they would initially turn to the doctor for medical help. However, for this question about secondary sources of help in Canterbury 31.06% of these patients said that they would go to their G.P.'s partner or another G.P. whereas in London only 6.5% of this groups would utilise another G.P.

The picture which these figures suggest is that the patient population who attend A.E.Ds. in Canterbury are more G.P.-oriented in terms of routine health matters than the patient population who attend A.E.Ds. in London. Although even in London the majority of attenders at a hospital casualty suggested that they wouldn't want casualty departments to replace general practitioners totally, 60.8% (N=199) said they wanted the general practitioner service to continue, 13.6% said they wanted G.Ps. replaced by A.E.D., and 7.5% didn't know. The remaining 18% gave no answer. The most common reasons for retaining G.Ps. given by these patients were that the hospital would be overcrowded and thus the serious cases would not obtain immediate treatment and that it was more "personal" going to a general practitioner (Cullinan 1979).

With regard to specific complaints patients were asked a series of hypothetical questions about whether they would go to a G.P. or direct to a hospital for certain conditions as well as their expectations about what a G.P. would do if they presented with various complaints. These questions were originally used in a national study by Cartwright (1967) and were used more recently by her in a follow-up study (Cartwright and Anderson 1979) and also in the Newcastle Accident Survey (Morgan 1974) and in a study of attenders at a London hospital (Cullinan 1979). In Table 5.22 patients' answers to the question are shown for both this study and three others. In this study 68.5% of the patients said that they would go direct to hospital. Compared with the other studies this is the lowest proportion of patients who said they would utilise the hospital directly. Three-quarters of patients in both the Newcastle and the National study said that they would go straight to hospital and in the study carried out on attenders at a London hospital the proportion was as high as 84.8%. These data suggest that for minor cuts the majority of patients said that they would go to hospital rather than a G.P. although the patient population in Canterbury seem to be less hospital-oriented for this condition than the rest, especially less than the patient population in London.

Patients were also asked whether they would expect their general practitioners to treat or refer to hospital when faced with four different

requests:- a cut that needed stitching, a sprained ankle that needed strapping, a cyst that needed excising and the carrying out of a blood test. Table 5.23 shows the results of these answers along with the results from other studies. In the cases of strapping of sprains, excision of simple cysts and carrying out a blood test a greater proportion of Canterbury patients expected their G.P. to act than in the other local studies although with strapping of sprains and carrying out a blood test the national population showed a slightly larger proportion. The patient population attending the London hospital had by far the lowest expectations of their G.Ps., either expecting them to refer or being uncertain about what they would do.

These results reinforce the implications that were derived from the previous figures that the patient population attending the Kent and Canterbury A.E.D. appear to be more G.P.-oriented or less hospital-oriented than populations in other areas.

The evidence available from this study does not allow for adequate explanations of such regional variations but it does allow for explanation of why patients in this study hold these views about appropriate choice of medical care system. Some evidence has been presented in the previous section on patient explanations for not attempting to contact a G.P. Two different types of explanation were highlighted in their answers. One emphasised the unavailability or inaccessibility of their G.Ps. when medical help was needed and the other emphasised the inappropriateness of the condition for G.P. treatment or care. Further evidence is available which sheds more light on patients' reasons for utilising a G.P. or a hospital casualty department.

Holohan, in her study, emphasised that patients have different expectations of the doctor-patient relationship in the general practitioner setting and in casualty department setting and this influences their choice of medical care system that is, the patient takes instrumental condition to the accident centre where treatment is needed but no relationship is required with the hospital staff. In contrast, expectations of the doctor-patient relationship in a G.P. setting are more expressive and this will have implications for the type of problem taken to the G.P. Some evidence from this study supports this distinction. For example, Table 5.24 shows the proportion of patients in this study who were satisfied or dissatisfied with the treatment received at the Accident and Emergency department. The table shows that 18.6% of the patients were dissatisfied and 70.5% said they were dissatisfied. This level of satisfaction may have implications for patient compliance with medical

instructions as well as further use of the service. The main dissatisfaction was with the time spent waiting and this time spent waiting may inhibit patient use of the accident and emergency department given the advantages or attractions for patient use identified by Roth (1971). However, the interest in patient satisfaction for present pruposes is in the aspects that are expressed as dissatisfactory and satisfactory by patients. Patients seem to identify two different aspects in their explanation. First, and this supports Holohan's argument, speed or lack of speed with which the service was delivered was emphasised and secondly, the amount of attention given to the patient by the medical staff. In this latter type of explanation patients varied between emphasising the quantity of attention given to the patient and the quality of attention given. The emphasis on the amount of attention given does suggest that patients use an 'expressive' component in evaluating medical care at the Accident and Emergency department although a very small proportion of the patients specifically mentioned the 'communication' aspects of the relationship. In fact, attention appears to have been identified in terms of the staff in general being helpful and patients did not express their need for more individual or privatised relationship in this context.

In contrast to these responses Table 5.25 shows patients preferences for medical treatment and why they accept such preferences. Half of the patients preferred a general practitioner for medical treatment and only 12.1% said they preferred the hospital. Another 24.4% said they chose the medical setting for treatment depending on what was wrong with them. Of the group who said they preferred their general practitioner for medical treatment the most common answer to why this was so identified either the more private or more personal nature of the setting (53.4% in all) and a further 7.0% said they felt more confident going to their general practitioner. This evidence certainly supports Holohan's argument about the 'expressive' nature of patient expectations about their relationship with their general practitioner. However, a further 11.8% said that they would never by-pass their general practitioner suggesting that they have internalised the traditional official rules proposed by health service personnel. In contrast, of the group who said that they preferred to go to hospital the most common explanation emphasised that the hospital was safer than going to a G.P. Of the group that said they would make a choice depending on the diagnosis a third said that they preferred going to their general practitioner. Others said their

decision depends upon the seriousness of their condition (24.2%) and 16.3% said hospitals were only used for emergencies.

Now this evidence suggests that almost a quarter of the patients make their own decisions about choice of medical care according to whether the condition is serious or diagnostic applicable or is an "emergency". Now this suggests that although the large majority of patients see their focus of professional medical care as their G.P. and the majority prefer it that way a large group of patients do have their own ideas about when it is appropriate to utilise the accident and emergency without contacting their general practitioner. This condition is further supported by results from Table 5.26 which shows the distribution of patient explanations of why they would go either to a G.P. or direct to hospital for a cut that needed stitching. 62.1% said that they would go direct to hospital. Almost two-fifths of this group said they wouldn't go to their G.P. because he would not treat a condition like that or wouldn't be available. Almost a fifth suggested that at the hospital one received immediate medical attention which indicated the use of the hospital for conditions that needed 'urgent' medical attention and another fifth said that the hospital was the most approriate place for the treatment of such a condition. Of the group who said that they would utilise the G.P., over a quarter said they expected that their G.P. would treat and just over a fifth said that they would telephone their G.P. for advice before acting. Just over a fifth emphasised 'circumstantial' aspects such as the G.P. being the nearest or the most convenient. Finally, 8.2% of this group said that they would utilise their G.P. to save "pressure" being placed on hospitals which once again shows how a proportion of patients have internalised official propaganda.

In this section on patient orientation towards health care the findings have suggested the following:

1. Patients who utilise the Kent and Canterbury Accident and Emergency departments in general turn to and say they prefer to turn to a general practitioner for professional attention. The reasons for this are predominantly that they find the doctor-patient relationship in the general practitioner setting more personal and private. Both these aspects are important for patients in evaluating doctor-patient relationships.

2. Although the conclusions in (1) are applicable at the general level, apart from those patients who contact their G.P. for everything because it is the

right thing to do", a large group of patients see the hospital as the most appropriate setting for specific complaints which requires specialist treatment which is not believed to be available at a G.P.'s, or in special circumstances where medical attention is required urgently and the G.P. would not be available or would not treat quickly enough. For the majority of patients the Accident and Emergency department is seen as a source of medical care in 'emergencies' or where medical attention is required urgently and for treatment of complaints which require special facilities.

The data in this section are useful in that they clearly illustrate notionly that laymen have their own ideas about when and where to consult the medical services but also the complexity of these ideas and the marked variation from patient to patient. Thus, the problem is to relate these ideas to the circumstantial or situational elements which have been described in the previous section which outlined the pathways that patients follow to the accident centre. Only in contexts where the patient or patient's representative has control over the decision-taking, such as possibly in the patient's own house, can these ideas be used exclusively to explain patient action. In the following chapter an attempt is made to take account of 'patient orientation' towards health care in terms of a general analysis of factors related to choice of medical care setting but at this stage with this general level of analysis patient orientation can only be treated superficially. In Chapter seven more in-depth data is presented which examines patient action in several contexts and patient orientation is examined in more depth.

Summary

This chapter was divided into three different parts. The major findings in each of these three parts were these.

A. Socio-environmental characteristics of the episode

1. Just under two-thirds of the 'episodes' happened outside a private home.
2. 15.5% of the patients were not permanent residents in the catchment area of the hospital.

B. Pathways to the accident and emergency department

1. Just over a half of the patients said they didn't contact the medical services as soon as possible after the onset of the episode.
2. 30.2% of the cases involved decisions to seek medical care being made at a location other than at the site of the episode. The most popular location for the decision to seek medical care was the patient's home (43.2%).
3. 80.5% of patients had contact with at least one person about their injury or ill-health and the majority of these contacts were close relatives.
4. In 27% of the episodes, the decision to seek medical care was made by a person other than the patient or patient's relatives.
5. 26% of the patients reported an attempt to contact a G.P. and 15% of the patients actually saw or spoke to a G.P. before going to hospital
6. Almost a fifth of the patients went by ambulance to the A.E.D.
7. 6.4% of the patients said they went to another casualty department going to the A.E.D. at the K. and C.

The analysis of the pathways that patients followed to get to the A.E.D. showed that overall 144 different routes were followed. The most common pathway (involving all nine idfferent stages) had the following characteristics - Site of episode at home, decision to seek medical care made as quickly as possible, site of decision to seek medical care outside home, no information given by relative, decision to seek medical care made by non-relative, no attempt to contact a G.P., ambulance called and taken straight to A.E.D. = 7.0% N=628.

C. Patient orientation towards health care

1. 2.3% of the patients said their focus for medical care was the A.E.D. and 58.4% said they would go to a G.P.

2. For the majority of patients the A.E.D. is seen as a source of medical care in 'emergencies' or when medical attention is required urgently and for treatment of complaints which require special facilities. It is interesting to note that over 28% of the patients in this study didn't know whether their G.P. would stitch a small cut or not.
3. 70.4% of the patients said they were satisfied with the treatment received at the A.E.D. The major complaint from patients was the length of the waiting time.

Table 5.1: Distribution of time of day when episode occurred and day of week

Hrs.	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		No Information		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
01.00							1	1.1			2	2.3	2	2.5			5	0.8
02.00					1	1.4	1	1.1	1	1.4	2	2.3	1	1.3			7	1.1
03.00	1	1.5					2	2.2			1	1.1					4	0.6
04.00			1	1.4	1	1.4	1	1.1			1	1.1					4	0.6
05.00			1	1.4			1	1.1			1	1.1					3	0.5
06.00	1	1,5			1	1.4	1	1.1	2	2.7			1	1.3			6	1.0
07.00	2	3.2			4	5.4			2	2.7	2	2.3					10	1.6
08.00	1	1.5	3	4.3	4	5.4	7	7.8	1	1.4	2	2.3	1	1.3			19	3.0
09.00	1	1.5	7	10.1	4	5.4	5	5.6	5	6.8	2	2.3	3	3.8			27	4.3
10.00	2	3.2	4	5.8	7	9.6	1	1.1	2	2.7	4	4.5	9	11.3	1		30	4.8
11.00	4	6.4	3	4.3	5	6.8	13	14.4	3	4.1	8	9.1	10	12.5			46	7.3
12.00	3	4.8	7	10.1	8	11.0	8	7.0	6	8.2	5	5.7	6	7.5	1		44	7.0
13.00	3	4.8	4	5.8	1	1.4	5	5.6	3	4.1	3	3.4	2	2.5			19	3.0
14.00	5	7.9	6	8.7	1	1.4	5	5.6	6	8.2	5	5.7	4	5.0			30	4.8
15.00	7	11.1	6	8.7	7	9.6	4	4.4	6	8.2	10	11.4	14	17.5	2		56	8.9
16.00	4	6.4	4	5.8	3	4.1	7	7.8	5	6.8	6	6.8	6	7.5	1		36	5.7
17.00	2	3.2	2	2.9	4	5.4	6	6.7	6	8.2	5	5.7	4	5.0	1		30	4.8
18.00	4	6.4	9	13.0	4	5.4	5	5.6	7	9.6	6	6.8	5	6.3	1		41	6.5
19.00	4	6.4			4	5.4	4	4.4	1	1.4	1	1.1	2	2.5	1		17	2.7
20.00	6	9.5	5	7.2	6	8.2	5	5.6	3	4.1	2	2.3	2	2.5			29	4.6
21.00	5	7.9	1	1.4	3	4.1	1	1.1	7	9.6	7	8.0					24	3.8
22.00	2	3.2	3	4.3	2	2.7	3	3.3	3	4.1	4	4.5	3	3.8			20	3.2
23.00	3	4.8	3	4.3	1	1.4	3	3.3	4	5.5	6	6.8	3	3.8	1		24	3.8
24.00	2	3.2			2	2.7	1	1.1			3	3.4	2	2.5	1		11	1.8
No Information	1	1.5													82		83	13.2
Total	63		69		73		90		73		88		80		92		628	100%

Table 5.2: Geographical location of "episode" and geographical location of patient (if different)

Patient's Address	ADDRESS OF "EPISODE"																					
	Canterbury		Herne Bay		Whitstable		Faversham		Sittingbourne		Ashford		Dover		Folkestone		Thanet		Within Kent		Outside Kent		No Information		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Canterbury	92	33.2	4	9.8	2	6.3					6	21.4	5	9.8	3	5.6	2	12.5	2	7.2	6	27.3			122	19.4
Herne Bay	9	3.2	19	46.3	1	3.1			1	14.3									1	3.6	5	22.7			36	5.7
Whitstable	8	2.9			10	31.3											1	6.3	1	3.6	2	9.1			22	3.5
Faversham	1	0.4					4	23.5					1	2.0			1	6.3	1	3.6					8	1.3
Sittingbourne	3	1.1					1	5.9											1	3.6					5	0.8
Ashford											6	21.4			3	5.6			1	3.6					10	1.6
Dover	5	1.8											19	37.2	5	9.3			1	3.6					20	3.2
Folkestone	3	1.1			1	3.1							1	2.0	19	35.1	1	6.3			2	9.1			27	4.3
Thanet	7	2.5															6	37.5	1	3.6	1	4.5			15	2.4
Within Kent	3	1.1			2	6.3	3	17.6					1	2.0	2	3.7			11	39.3	1	4.5			23	3.7
Outside Kent	20	7.2	4	9.8	4	12.5					4	14.3	9	17.6	10	18.5					5	22.7	7	11.3	63	10.0
Same as address of "episode"	129	46.6	14	3.4	12	37.5	9	52.9	6	85.7	12	42.9	15	29.4	12	22.2	5	31.3	8	28.6					227	36.2
No Information																							55	88.7	55	8.8
Total	277	100%	41	100%	32	100%	17	100%	7	100%	28	100%	51	100%	54	100%	16	100%	28	100%	22	100%	62	100%	628	100%

Table 5.3 Reasons for patients who were not permanent residents in the area being present in the area

Resident in area	No.	%
Permanent residents in the area	526	83.7
Not permanent residents - On holiday in area - for the day	10	1.6
Not permanent residents - On holiday in area - more than a day	20	3.2
Not permanent residents - Travelling through area	7	1.1
Not permanent residents - Working in area - for the day	6	1.0
Not permanent residents - Working in area - more than a day	30	4.8
Not permanent residents - Staying with relatives in area	8	1.3
Not permanent residents - No fixed abode	1	0.2
Not permanent residents - other	15	2.4
No information	5	0.8
Total	628	100%

Table 5.4 Distribution of locations of episode

Location of episode	No.	%
Own home	189	30.1
Friend's home	34	5.4
Stranger's home	13	2.1
School	40	6.4
Hospital	12	1.9
Street	51	8.1
Road	52	8.3
Harbour	12	1.9
Work	75	11.9
Recreation	26	4.1
Caravan/Camp site	9	1.4
Shop	6	1.0
Field/Orchard	17	2.7
Play area	7	1.1
Park/Sport's Field	21	3.3
Other	22	3.5
No information	42	6.7
Total	628	100%

Table 5.5 Distribution of signs and symptoms reported by patient with non-traumatic complaint

	No.	%
Traumatic complaint	502	78.8
Non-traumatic complaints		
Collapse	15	2.4
Swollen and infected body area	19	3.0
Problems with ear, eye, nose or teeth	11	1.7
Pains in stomach or chest	16	2.5
Fits	3	0.5
Flu symptoms	2	0.3
Headache	2	0.3
Other	17	2.7
N.A.	41	7.8
Total	628	100%

Table 5.6 Distribution of activities that led to injury

	No.	%
Self-inflicted injury including intentional ingestion of drugs	9	1.4
Intentional assault by other	15	2.4
Fighting	9	1.4
Accidental ingestion of drugs or other substances	8	1.3
Foreign body accidentally entering eye or other part of body	32	5.0
Fall on or from stairs, steps, ladders or scaffolding	37	5.8
Fall from or out of building or other structure	10	1.6
Fall due to slipping, tripping or stumbling on same level	81	12.7
Other type of fall	44	6.9
Bites and stings by animals/insects	24	3.8
Struck by or against objects	106	16.6
Crushed between objects	21	3.3
Strenuous movements, twisting, etc.	20	3.1
In contact with cutting or piercing instruments	23	3.6
Burn or scald	16	2.5
Pedestrian hit by motor vehicle	2	0.4
Motor vehicle in collision with other motor vehicle	36	5.7
Other	9	1.4
Not applicable (non-traumatic complaints)	85	13.3
Not answered	41	7.8
Total	628	100%

Table 5.7: Distribution of number of people involved in an episode and number of people who suffered as a result of episode

No. of people involved	No. of people injured or suffered as a result of complaint					
	Patient only	One other	Two other	Three other	No Information	Total
Patient only	350					350
One other	9	34	9			52
Two other		5	1	4		10
Three other			4	1		5
Four other		3	3	2		8
No Information					203	203
Total	359	42	17	7	203	628

Table 5.8: Was patient alone when the episode happened?

How many people with patient at time of episode	No.	%
Alone	166	26.4
One	146	23.2
Two	80	12.7
Three	42	6.7
Four or more	129	20.5
No Information	65	10.4
Total	628	100%

Table 5.9 Patients who said they didn't contact the medical services as soon as possible after the episode occurred and location of episode

Patients who said they didn't contact the medical services as soon as possible because	Episode occurred at home		Episode occurred outside home		Total	
	No.	%	No.	%	No.	%
Their complaint wasn't serious enough	37	39.8	85	45.0	122	43.3
Thought that their complaint would improve	20	21.5	32	16.9	52	18.4
General practitioner not available	2	2.2	6	3.2	8	2.8
Wasn't told to go by official or person with medical training			8	4.2	8	2.8
No transport	3	3.2	7	3.7	10	3.5
Didn't want to bother doctor	3	3.2	2	1.1	5	1.8
Just wanted to take time	1	1.1	3	1.6	4	1.4
Other	24	25.8	32	16.9	56	19.9
No information	3	3.2	14	24.0	17	6.0
Total	93	100%	189	100%	282	100%

Table 5.10 Patients who said they contacted the medical services as soon as possible after the episode occurred and their reasons for saying they could or could not have put off contacting the medical services until the following day

	Episode occurring at home				Episode occurring outside home					
	Put off contacting the medical services until the following day				Put off contacting the medical services until the following day				No information	Total
	Yes		No		Yes		No			
	No.	%	No.	%	No.	%	No.	%		No. %
It was convenient to go out at that time	1	12.3	-	-	4	16.7	0	-		5 1.6
No advice, told to go by other	4	50.0	7	8.0	12	50.0	32	17.4		55 18.1
Complaint - too painful	-	-	16	18.2			21	11.4		37 12.2
Complaint - too serious	1	12.3	8	9.1	1	4.2	16	8.7		26 8.6
Deep cut/loss of blood			14	15.9			23	12.5		37 12.2
Suspected fracture			1	1.1			13	7.1		14 4.6
Restricted activities			2	2.3	1	4.2	4	2.2		7 2.3
Specific medical treatment needed	1	12.3	6	6.8	1	4.2	13	7.1		21 6.9
Needed medical attention	-		21	24.0	2	8.4	28	15.2		51 16.8
Uncertain about diagnosis			3	3.4	1	4.2	8	4.4		12 3.9
Other	1	12.3	8	9.1	1	4.2	16	8.7		26 8.6
No information	1	12.3	2	2.3	1	4.2	11	6.0		15 4.9
Total	8	100%	88	100%	24	100%	184	100%		304 100%

Table 5.11: Site of decision to seek medical care

Site of decision to seek medical care		No.	%
Decision to seek medical care at site of episode:			
	Home	162	25.8
	Other's home	31	4.9
	School	15	2.4
	Hospital	14	2.2
	Street	38	6.1
	Road	33	5.3
	Work	47	7.5
	Recreation	24	3.8
	Other	34	5.4
Decision to seek medical care not at site of episode:			
	Home	109	17.4
	Other's home	18	2.9
	Other	62	9.9
No Information		41	6.5
Total		628	100%

Table 5.12: Length of time between trouble starting or episode occurring and an attempt to contact the medical services

Time difference

1 hr.		1 < 3 hr.		3 < 6 hr.		6 < 12 hr.		12 < 24 hr.		24 < 48 hr.		2 days +		No Information		Total	
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
287	45.7	58	9.2	41	6.5	40	6.4	45	7.2	37	5.9	57	9.0	63	10.0	628	100%

Table 5.13: Distribution of patient contacts and advice given by contacts (both at and away from site)

	No advice given		Rest - don't move		Go to AED		Go to G.P.		Go to AED or GP		Ambulance		Other		No Information	Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%
Parent/Spouse	27	24.1	5	4.5	51	45.5	15	13.4	1	0.9	3	2.7	10	8.9	2	112	100%
Other Relative	7	38.9			10	55.5	1	5.6								18	100%
Friend	24	32.4	4	5.4	31	41.9	3	4.1	11	1.4	2	2.7	9	12.1	2	74	100%
Neighbour	8	29.6			10	37.1	3	11.1			3	11.1	3	11.1		27	100%
Stranger	14	35.0	8	20.1	7	17.5					4	10.0	7	17.5		40	100%
Policeman	3	17.6	2	11.7	10	58.8							2	11.7		17	100%
Other Official	2	28.5	1	14.0	2	28.5							2	28.5		7	100%
Employer/ Teacher	10	18.1	6	10.9	21	38.2	8	14.5	1	1.8			9	16.3	1	55	100%
Hospital Staff			1	16.6	3	50.0							1	16.6	1	6	100%
Other person with training in first-aid	3	15.0	2	10.0	11	55.0	1	5.0					3	15.0		20	100%
Chemist							1									1	100%
Work mate			15	40.5	4	10.8	9	24.3	1	2.7	1	2.7	7	18.9		37	100%
Other	2	9.5			8	38.1	1	4.8			2	9.5	6	28.6	2	21	100%
No Information																70	
No contact with anyone																114	
Unconscious																9	
Total																628	

Table 5.14: Distribution of persons who made the decisions to contact the medical services

Who made decision to contact medical services	No.	%
Patient	152	24.2
Relative - parent/spouse	180	28.7
Relative - other	10	1.6
Friend	31	4.9
Neighbour	11	1.8
Stranger	21	3.3
Policeman	11	1.8
Other official	13	2.1
Employer/Teacher	42	6.7
Hospital staff	8	1.3
Other person with training in first-aid	23	3.7
Chemist	2	0.3
Joint decision	52	8.3
Work mate/Team mate	5	0.8
Other	12	1.9
No Information	65	10.3
Total	628	100%

Table 5.15: Patient explanations for not attempting to contact a G.P.

Patient explanation for not attempting to contact a G.P.	Did you think about contacting a GP?				No Information		Total	
	Yes		No					
	No.	%	No.	%	No.	%	No.	%
Not registered with a GP or too far away from GP			50	15.0			50	12.1
GP not available - inappropriate time	11	18.3	55	16.5			66	16.0
GP wouldn't have treated or would't have seen	17	28.3	52	15.6			69	16.7
Contact GP not quick enough	6	10.0	14	4.2			20	4.8
Condition not appropriate for GP - too trivial	1	1.7	22	6.6			23	5.6
Condition not appropriate for GP - needed specific treatment	4	6.7	20	6.0			24	5.8
Hospital is appropriate place			31	9.3			31	7.5
Hospital is more convenient	4	6.7	4	1.2			8	1.9
Other	17	28.3	75	22.5			92	22.3
No Information			10	3.0	20	100	30	7.3
Total	60	100%	333	100%	20	100%	413	100%

*413 are patients who didn't contact or attempt to contact a G.P.

163 Not applicable

52 No information

628 Total sample.

Table 5.16: Proportion of patients who did and didn't attempt to contact a G.P.

Attempt to contact a G.P.	No.	%
No	413	65.8
Yes - couldn't contact surgery	6	1.0
Yes - spoke to family doctor	51	8.1
Yes - G.P's partner	14	2.2
Yes - practice receptionist	50	8.0
Yes - practice nurse	3	0.5
Yes - G.P's wife	7	1.1
Yes - Don't know who spoke to	5	0.8
Yes - other	25	4.0
Yes - no information	2	0.3
No information	52	8.0
Total	628	100%

Table 5.17: What was the patient told on initial contact with G.P.'s surgery.

What was patient told?	No	%
To make an appointment to see G.P.	9	5.7
To go direct to hospital	84	53.5
No appointment available	1	0.6
G.P. would call	13	8.2
Stay home and rest	2	1.2
No doctor available	1	0.6
Prescription to be collected from surgery	1	0.6
Nothing	1	0.6
Other	40	25.5
No information	5	3.2
Total	157	100%

Table 5.18: Patients who attempted to contact a G.P. and how the initial contact was made, who patient spoke to and what patient was told and if the patient saw the G.P. before going to hospital.

How patients reached their general practitioner	No	%
Spoke to G.P. or other doctor on telephone and then saw G.P.	10	6.4
Spoke to G.P. or other doctor on telephone and told to go to hospital	15	9.6
Spoke to other person (not a doctor) on telephone and then saw G.P.	22	14.0
Spoke to other person (not a doctor) on telephone and told to go to hospital	31	19.7
Spoke to doctor on telephone but didn't see doctor	4	2.5
Spoke to other on telephone and didn't see doctor	9	5.7
Attendance at surgery and saw G.P.	39	24.8
Attendance at surgery and told to go to hospital by other but didn't see G.P.	7	4.5
Attendance at surgery, doctor told nurse to tell patient to go to hospital but didn't see doctor	2	1.3
Attendance at surgery, didn't see G.P. but spoke to other	4	2.5
No information	14	8.9
Total	157	100%

Table 5.19: How patient reached Accident and Emergency Department

How patient reached A.E.D.	No.	%
Ambulance	123	19.6
Police vehicle	2	0.3
Private car	360	57.3
Walked	18	2.9
Bus	13	2.1
Taxi	13	2.1
Works transport	29	4.6
Other	17	2.7
Pit ambulance, etc.	6	1.0
No information	47	7.5
Total	628	100%

Table 5.20: Who called for ambulance?

Who called for an ambulance	No.	%
Patient/relative	16	13.0
Neighbour	7	5.7
Friend	15	12.2
Bystander	29	23.6
Police officer	9	7.3
Other officer	15	12.2
G.P.	19	15.4
Employer	7	5.7
Hospital staff	6	4.9
Total	123	100½
N.A.	505	

Table 5.21: Patient's focus for medical care and where patient would turn to if didn't have this focus available

If medical help not available where does patient turn	Who or where does patient turn to when needs medical help or advice												No Information	Total	
	G.P.		A.E.D.		Friends Relatives Neighbours		Ambulance Police Chemist		Own judgement		Other				
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%
G.P. surgery (partners)	114	31.0	9	39.1	39	67.2	3	37.5	2	66.7	8	57.1		175	27.9
A.E.D.	195	53.1	10	43.5	15	25.9					3	21.4		223	35.5
Friends/ Relatives	19	5.2	1	43.0	3	5.2	4	50.0						27	4.3
Ambulance/ Chemist	21	5.7												21	3.3
Myself	4	1.9			1	1.7	1	12.5						6	0.9
Other	14	3.8	3	13.1					1	33.3	3	21.4		21	3.3
No information													152	152	24.2
Total	367	100%	23	100%	58	100%	8	100%	3	100%	14	100%	152	628	100%

Table 5.22: Patients' probable actions - small cut needing stitches. This study compared with Newcastle Accident Survey, a study carried out in London hospital, and Cartwright's randomly selected sample (1979)

Probable action for small cut needing stitches	Canterbury		Newcastle		National 1979		London	
	No.	%	No.	%	No.	%	No.	%
Go to own doctor	147	25.8	41	17.8		20.0	24	14.5
Go straight to hospital	390	68.5	174	75.7		76.0	140	84.8
Uncertain	32	5.6	15	6.5		4.0	1	0.7
Total	*569	100%	230	100%		100%	165	100%

*No information - not included as comparing with other studies -

No information = 59
Total = 628

Table 5.23: Patients' expectations of procedures undertaken by general practitioners: Canterbury study in comparison with Newcastle Accident Survey, a study based on a London Hospital (Cullinan 1979) and Cartwright's follow-up of a national random sample (Cartwright and Anderson 1979)

Patients' Expectations	Stitching of small cuts						Strapping of sprains								Excision of simple cysts								Carry out a blood test					
	Canterbury		Newcastle		*National		Canterbury		Newcastle		London		National		Canterbury		Newcastle		London		National		Canterbury		London		National	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
G.P. would act	159	28.3	84	36.5	454	34.2	390	70.0	132	57.4	94	57.7	596	74.0	390	70.0	132	57.4	36	22.1	343	42.0	334	59.3	60	36.8	533	65.0
G.P. would refer	245	43.6	120	52.2	462	34.8	106	19.0	81	35.2	45	27.6	185	23.0	106	19.0	81	35.2	88	54.0	417	51.0	148	26.3	72	44.2	262	32.0
Uncertain	157	28.0	26	11.3	413	31.1	61	11.0	17	7.4	24	14.7	24	3.0	61	11.0	17	7.4	39	23.9	57	7.0	81	14.4	31	19.0	24	3.0
Total	*561	100%	230	100%	1329	100%	*557	100%	230	100%	163	100%	805	100%	*557	100%	230	100%	163	100%	817	100%	*563	100%	163	100%	820	100%

*No Information = 67

*No Information = 71

*No Information = 63

*No Information = 65

*This figure is derived from 1967 study as question not asked in 1977

Table 5.24: Patient satisfaction with treatment received at the Accident and Emergency Department

Patient satisfaction with medical treatment	No.	%
Satisfied - general	242	38.5
Satisfied - in comparison with other hospitals	13	2.1
Satisfied - explanation emphasised speed	50	8.0
Satisfied - explanation emphasised attention given by staff	55	8.8
Satisfied - explanation emphasised staff did all they could	24	3.8
Satisfied - but had to wait too long	58	9.2
Dissatisfied - critical of medical treatment	38	6.1
Dissatisfied - critical of time spent waiting	25	4.0
Dissatisfied - left alone in examination room too long	7	1.1
Dissatisfied - forgotten about	4	0.6
Dissatisfied - other	43	6.8
Uncertain - assumed satisfactory	4	0.6
No information	65	10.3
Total	628	100%

Table 5.25: Patient explanations of why they would go to a G.P. or to a hospital for a minor cut at home that needed stitching

Explanation of choice	Where would you go for a small cut at home that needed stitching ?				No Information		Total	
	Straight to Hospital		Family Doctor					
	No.	%	No.	%	No.	%	No.	%
No permanent G.P.	5	1.3					5	0.8
G.P. would treat			42	28.6			42	6.7
Telephone Doctor	1	0.3	33	22.4			34	5.4
G.P. not available	42	10.8	1	0.7			43	6.8
G.P. send to hospital	42	10.8	2	1.4			44	7.0
G.P. wouldn't treat	71	18.2					71	11.3
Receive immediate attention	76	19.5	2	1.4	1	1.1	79	12.6
Appropriate place for treatment	74	19.0	1	0.7	1	1.1	76	12.1
Prefer hospital	15	3.8					15	2.4
Save pressure on hospital			12	8.2			12	1.9
Nearest	9	2.3	28	19.0	1	1.1	38	6.1
More convenient	10	2.6	5	3.4			15	2.4
Depends on severity	6	1.5	2	1.4	3	3.3	11	1.8
Depends on time	5	1.3	9	6.1	4	4.4	18	2.9
Other	23	5.9	6	4.1	18	19.8	47	7.5
No information	11	2.8	4	2.7	63	69.2	78	12.4
Total	390	100%	147	100%	91	100%	628	100%

Table 5.26: Patient explanations of why they prefer G.P. or hospital for medical treatment

Explanation of preference	Preferred medical setting for medical treat						No Information		Total	
	Family Doctor		Hospital		Depends on what's wrong					
	No.	%	No.	%	No.	%	No.	%	No.	%
Depends on seriousness	5	1.6			37	24.2	1	1.2	43	6.8
More private	104	33.1					1	1.2	105	16.7
More confidence	22	7.0							22	3.5
More convenient	22	7.0	4	5.3					26	4.1
Feel safer	1	0.3	15	19.7	1	0.6			17	2.7
More personal	64	20.3	2	2.6					64	10.2
Never bypass a G.P.	37	11.8			2	1.3			39	6.2
Hospital for emergencies	9	2.9	2	2.6	25	16.3			36	5.7
Depends on diagnosis	1	0.3			20	13.1			21	3.3
Prefer G.P.	6	1.9			51	33.3	2	2.4	59	9.4
Other	33	10.5	53	69.7	11	7.2	13	15.3	110	17.5
No information	10	3.2			6	3.9	68	80.0	84	13.4
Total	314	100%	76	100%	153	100%	85	100%	628	100%

Chapter 6

An analysis of the factors associated with choice of medical care systems

In this chapter the data collected from the sample of attenders at the Accident and Emergency department are used to examine the various influences on patients' choice of medical setting for medical care, i.e. the choice between using an accident and emergency department and using a G.P. However, as was previously suggested, this study cannot answer this question fully for it is restricted to patients who went directly to the hospital or who were referred to the hospital by a medical person such as a general practitioner, or by an employer, teacher or policeman. Data are not available on those people who did nothing or self-medicated or went to their general practitioner or other medical or non-medical person and were not referred to the accident centre. Certainly, data from other studies have shown that general practitioners do treat a substantial proportion of minor trauma cases (Newcastle Accident Survey, Russel and Holohan 1974).

In chapters one and two, the reasons for concern about patients choice of setting for medical care were outlined. Much of the concern stems from claims that the casualty service is being 'misused'. In spite of these claims little systematic research has been carried out in this field specifically examining patients' decision-taking process. One of the major assumptions implicit in much of the research has been that if alternative types of medical service are available then the patient has a real choice between services. There has been a recognition that in some cases alternative forms of care are not available (such as when G.P.s limit their time periods for seeing patients) and thus patients will utilise alternative forms of care such as the accident and emergency department. More recently the Casualty Surgeons' Association have suggested that patients choices may be limited by certain social predicaments.

The Casualty Surgeons' Association propose that the work of the Accident and Emergency department does (or should) consist of the provision of medical services in emergency situations. They might argue that emergencies should be defined in social rather than clinical terms. Patients whose choice of alternative services of medical care was limited by their social predicament might be seen by the C.S.A. as legitimate

attenders at the accident and emergency department. In that the accident and emergency department is seen to be providing a 'community' emergency service then social predicaments are defined in terms of predicaments occurring in community situations. Predicaments are found when episodes take place in the community which lead to injury or ill health and which disrupt the 'normal' flow of daily activities in public life. The major aim is to restore these activities back to their 'normal' flow and the patient is taken to hospital and the predicament is resolved. Examples of this are a tourist spending a short time in an area, becoming ill or injuring himself and requiring immediate medical treatment so as to continue with his activities in the community. Another example involves not so much the patients predicament or the priority he puts on the restoration of the flow of normal activities but more on the predicament of the 'other' people involved with the episode. In the case of a collapse in treatment it might be argued that the police or other 'officials' often use referral to the accident centre as a means of restoring back to normal that aspect of public life which is disrupted and for which they have some responsibility. Thus the urgent or emergent nature of the episode is seen not in terms of the perceived seriousness of the sufferer's condition and subsequent evaluations of the most appropriate hospital care but in terms of the need to restore public life back to 'normal'.

However, the problem with all these approaches is that, quite understandably, they are dominated by medical interests in the ways accident and emergency services should be organised without taking account of the contexts in which the patients take decisions about the utilisation of G.P. or casualty services. Certainly, patients preferences or orientation to particular medical services have only recently been taken seriously and consequently heve not been seen as legitimate reasons for attending the hospital. The availability of services are assumed to be enough to give the patient a real choice and whether the patient feels these services are accessible to him have been taken into account.

In the light of the above the following analysis is presented and is divided into two parts aiming to examine two distinctly different questions.

(1) What are the important influences on the decision to go to an accident and emergency department rather than a general practitioner for medical treatment?

(2) What are the influences on the site and timing of the decision to seek medical care?

In the first part of the analysis aimed at answering question (1) above the 'outcome' variable will be if the patient or patients representative made or didn't make an attempt to contact a general practitioner. The 'independent' variables will include both organisational factors which have been shown to be associated with choice of medical care setting and factors associated with the patient which include background characteristics such as age and sex and features associated with patient orientation towards health care and patient perception of the urgency with which medical attention is required. These variables will be explained in more detail in the following section. The basic aim of this analysis is to evaluate the C.S.A.'s propositions and so some data have been collected which might be illustrative of the circumstantial element which has been emphasised in the C.S.A.'s approach. The data which have been chosen to illustrate the social circumstantial or social predicament have two dimensions. First, as in the C.S.A.'s approach emphasis is placed on the 'community' aspect of emergencies the socio-environmental location of the episode or more specifically the socio-environmental location of the decision to seek medical care will be well as one example. Secondly, the status of the person who made the decision to seek medical care will be included in the analysis as it will serve to represent the view that the social predicament of 'others' such as public officials have an influence on choice of medical care system.

The relationship between these two 'circumstantial' factors and the choice of medical care system will be assessed along with the relationship between the other independent variables and the outcome variable.

The second question attends to examine an assumption implicit in the Casualty Surgeons' Association proposition that the presence of certain individuals in certain situations will increase the chances of medical attention being required more urgently and thus increase the chances of a decision to seek medical care being made at the site of the episode and also the decision being made more speedily. In this particular case the outcome variable will be a combination of the time period between the episode occurring and whether the decision to seek medical care was made at the site of the episode or not.

In both parts of the analysis the whole of the random sample is used. Initially, it was proposed to leave out both those groups of patients not registered with a G.P. and those who were registered with a G.P. outside the area. However, given that formal arrangements do exist for G.P.'s to be available for both these groups they were included in the analysis as both choices of medical setting were potentially still available.

1. <u>The Influences on patients going to the accident and emergency department or a G.P.</u>

The 'outcome' variable which will be used in this analysis will be whether the patient said that they attempted to contact a G.P. or not. As the analysis is concerned with the influences on the decision-taking process it is important to identify a decision to contact a G.P. even if that attempt was unsuccessful. One problem with using this type of classification is that it would be argued that patients said they attempted to contact a G.P. when in actual fact no attempt was made. It is argued that patients would do this so as to make their attendance at the casualty more 'legitimate'. It may have been possible to 'validate' patients' accounts by asking their G.P. or their G.P.'s receptionist. However, it is doubtful whether this really is a significant problem for this study because the interviews were carried out in the patients' home and interviewers ensured that the patient was made aware that the interviewers were not employed by the hospital or representing the views of the hospital. Certainly, if the problem was a significant one then it might be expected that more patients would have claimed that they couldn't contact their G.P.'s surgery than the six who actually did.

The following variables will be used in the analysis to examine their relationship with the outcome variable.

1. Site of Episode and Site of Decision to seek medical care
2. People with whom the patient had contact with during the decision-taking process
3. Patient's perception of the emergent nature of the episode, Clinical assessment of urgency and time taken to decide to seek medical care
4. Type of clinical condition
5. Time of day and Day of Week on which decision to seek medical care is made

6. Age and sex of patient
7. Patient's routine pattern of medical care seeking

Table 6.1 shows the initial choice of medical care system and the socio-environmental site of the episode. The results suggest where the episode occurred within the home there was a greater likelihood of an attempt being made to contact a general practitioner than where the episode happened elsewhere. The most marked differences occurred in initial choice of medical care system between those episodes that happened at home and those that happened on the road or in the street. Table 6.2 shows the relationship between the site of the decision to seek medical care and the initial choice of medical care system. These results show that there was a greater likelihood of patients going directly to the accident and emergency department if the decision to seek medical care was made at the site of the episode. Thus the results presented in Table 6.1 do not give a true indication of the influence of socio-environmental location on the initial choice of medical care system as many patients went to another site before making a decision to seek medical care. Table 6.3 embraces both of these aspects and shows the site of the episode, the site of decision to seek medical care and the initial choice of care system. More marked differences are shown in this table than in Table 6.1. For example, when a decision to seek medical care was made in the patient's home, irrespective of whether the site of episode was in the home or not, there was a much greater likelihood of an attempt being made to contact a G.P. than if the decision had been made elsewhere. In just over 40% of the cases where a decision to seek medical care was made in the home an attempt was made to contact a G.P. but in only 3.1% of the cases where a decision was made at the site of an episode on the road is an attempt made to contact a G.P. and the comparable figure for the street is 8.6% and at a recreation site 4.5%. Both schools and employers used G.P.'s although the former more than the latter. The positions of schools and employers will be discussed in more depth at a later stage. It is also interesting to note that the results from Table 6.3 show that for those cases where the episode happened at home but the decision to seek medical care is made elsewhere 22.2% attempted to contact a G.P. This figure is higher than most of the others and may suggest the influence of 'non-medical' factors in decision-taking. More will be said about that issue in the following chapter but the results so far

clearly indicate that the socio-environmental location of the decision to seek medical care may have a significant influence on the initial choice of medical care system. Whether this is due to the location being an artefact of the severity of the patient's condition or the role of 'others' in referral and decision-taking or due to other aspects is at this stage unclear.

Tables 6.4 and 6.5 show the influence of other people in the initial choice of medical care system. Table 6.4 shows this 'outcome' by who made the decision to seek medical care. The results suggest a relationship between the status of the person who made the decision and the initial choice of medical care system. If the police, other public officials, other personnel with medical knowledge or strangers made the decision then there was less likelihood of an attempt to contact a G.P. being made than if the parent or spouse or friend or neighbour had made the decision. Once again, there is an indication that schools or employers tended to use the G.P. or attempt to use the G.P. more than other 'formal' decision-takers. However, apart from those who made the decision to seek medical care other people may have an influence on the patient's action through giving advice or other more subtle pressures. Table 6.5, therefore, shows those with whom the patient had contact before the decision to seek medical care was made, although this does not mean only at the site of the episode. Obviously, this is a crude indicator of the influence of 'others' on the patient's action, as mere 'contact' may not influence the patient's decision at all. More detailed data is discussed in the following chapter. The difference in Table 6.5 in the initial choice of medical care and whom the patient had contact with are not as marked as those found in Table 6.4, although a similar trend is suggested when comparing patterns of choice of care system between contacts with police and bystanders on the one hand and contacts with relatives and friends or no-one on the other. Certainly, these data in Tables 6.4 and 6.5 suggest that contact with people holding 'formal' positions did not necessarily lead to a single pattern of action in terms of the initial choice of medical care.

Tables 6.6 and 6.7 refer to the urgency with which medical attention was required from both the patients and doctors' points of view, and their relationship with initial choice of medical care system. The patient's perception of the urgency with which medical attention was

required is crucial to this analysis as it will indicate whether patients seemed to relate 'urgency' with going to the hospital rather than a G.P. If this is the case it may prove difficult to disentangle the input of other 'external' circumstances on the patient's pattern of action. The indicator of patients' evaluation of the urgency with which medical attention was required is based on the question, 'Did you think that the episode that you were involved in was an emergency.' It is felt that those giving a positive reply to this question believed that their condition was 'medically' urgent. Table 6.6 shows that there were slight differences in the choice of initial medical setting between patients with differing perceptions of the emergent nature of their condition, suggesting patients may have discriminated between medical care settings on the grounds of 'medical' urgency.

Table 6.7 suggests also a relationship between initial choice of medical care system and clinical assessment of the urgency medical attention was needed. The less clinically urgent cases had a greater likelihood of going to a G.P. than going direct to hospital. Now this says nothing about patient or laymen's decision-making as it has been clearly shown that the framework of knowledge available to medical person and lay person are distinctly different (Dingwall 1976, Fabrega 1972).

Further more indirect evidence on the relationship between 'urgency' and choice of medical care system is shown in Table 6.8. In this case the time taken to make a decision to seek medical care after the onset of the episode is used as the independent variable. The results show that the smaller the time period between onset of episode and decision to seek medical care the more likely the patient will have gone direct to the hospital. For the group of patients where the decision to seek medical care was made within three hours of the onset of the episode less than a quarter attempted to contact a G.P. compared with just over a half of patients where the decision to seek medical care was taken at least 48 hours after the onset of the episode.

Tables 6.9 and 6.10 show the relationship between the initial choice of medical care system and the type of condition. The analysis is carried out in two different ways. Table 6.8 shows the approach that has been used in the previous tables, comparing the initial choice

of medical care system with the diagnostic classification of conditions. It was proposed initially to use the patients' definition of what was wrong at the time of decision-making as it was felt that patients' initial definitions of their complaint had more relevance for the analysis of lay decision-making in illness and injury than clinical classifications. However, the wide variety of definitions offer d by patients proved too difficult to quantify simply, so these data will be referred to in a more descriptive sense in the following chapter. This analysis contains only the clinical classifications of the type of complaint. The results from the table indicate that overall, as might be expected, non-traumatic complaints were more likely to be taken orf attempted to be taken to a G.P. than traumatic complaints, although there were marked variations between the different types of traumatic condition. In the case of lacerations there was little contact with a G.P. , which may reflect the fact that patients felt the hospital was the proper place for the treatment of lacerations or it may reflect the fact that G.P.s treated most of them themselves instead of referring them to hospital. The table shows a reverse trend for fractures and foreign bodies. In both these cases this may indicate that for these complaints the patients regarded the hospital or G.P. as real alternatives but once again it may reflect the referral policies of G.P.s. G.P.s may be more likely to refer suspected fractures to hospital than other complaints because they do not have X-ray facilities, and a similar lack of facilities may apply to treatment of foreign bodies. Certainly, these data suggest, even given their limitations, that for the majority of traumatic complaints (possibly apart from lacerations) the G.P. is believed to be an alternative source of treatment by a substantial group of the population.

A different way of analysing these data is shown in Table 6.10. In this table the group who lived permanently in the East Kent area who were aware of the local network of health care facilities are compared with the group who were only visiting the area for a short time and were presumably unaware of the local network. The analysis compares the range of complaints brought by visitors, the assumption being that if the range of conditions is exactly the same for these two groups it could be argued that, irrespective of socio-environmental location, patients only take certain types of complaint to hospital and thus have specific ideas about what is appropriate for the G.P. and what is not.

If on the other hand the range is different then there is an indication that in some circumstances the hospital is used as their central source of care. Results from Table 6.9 indicate that the range of conditions was different for the two groups in the way that might be expected in that the non-traumatic element in the case mix is larger in the visitors groups than in the other group.

Table 6.11 shows the relationship between the time of the day and the day of the week on which the decision to seek medical care was made and the initial choice of medical care system. The time of day category has been split up between 9 a.m.-6 p.m. and any time outside those hours. This grouping is based on the assumption that during these hours, 9 a.m.-6 p.m., the doctors are more likely to be available for contact than during the other hours. Similarly, it is assumed that in the weekdays the general practitioner may be more available than at the weekend. The table shows which of these organisational factors are related to patients' initial choices of medical care system. The evidence suggests that patients who made their decision to seek medical care between 9 a.m. and 6 p.m. were more likely to contact a G.P. than those making decisions outside those hours and this relationship seemed to hold throughout all weekdays except Fridays. On Saturday the pattern reversed but on Sunday the pattern reversed back to that found on the majority of weekdays. The data also suggests that at weekends fewer people tried to contact their G.P.s than at other times of the week. So, as might be expected, both the time of the decision to seek medical care and the day of the week on which decision to seek medical care was made may be related to initial choice of care system.

Table 6.12 shows the relatioshhip between the age and sex of the patient and then initial choice of medical care system. Studies (Russell and Holohan 1974) have shown that the very young and the old use G.P.s more often than the accident centre and females do so more often than males. These patterns are clearly supported by the data presented in Table 6.12. For both males and females the very young and the elderly were more likely to have attempted to contact their G.P.[1] than other age groups. The most marked differences were found between males and females in the youngest age group. Younger males were less likely to go to a G.P. than younger females.

Tables 6.13 and 6.14 refer to what has been loosely termed the

'orientation' of the patient to the accident and emergency department or to the G.P. or to either, depending on what is wrong. Two different indicators of orientation are used. In the previous chapter it was evident that whilst the vast majority of patients turn to their G.P. for general matters of health a large group would go direct to the accident amd emergency department for a cut leg that they thought needed stitching. Thus whilst the G.P. is the central focus of care for general ill-health many patients would go to the accident centre for specific treatment facilities. In Table 6.13 an attempt has been made to combine these two different aspects and to compare it with the patient's initial choice of medical care system. Of particular interest are the groups who said they would go to a G.P. for both general matters of health and specific treatment facilities and those who said they would use the accident centre for both these aspects of health care. The result is consistent with expectations. The more hospital orientated the patients were the less the likelihood of their contacting a G.P., although over half of those patients who could be defined as G.P. orientated, (i.e. their central focus of care is a G.P. and they would go to a G.P. for stitching, actually went direct to the accident centre.

Table 6.14 shows the relationship between any previous use of the accident and emergency department over last year and the initial choice of medical care setting. The data suggests that there are small differences between those who had been to the accident and emergency department at least once in the past year and initial choice of medical care system. As might be expected, a higher proportion of patients who had used the accident and emergency department previously went direct to hospital without attempting to contact a G.P.

Data presented in this section have, given the limitations in the sample population, suggested that a number of different factors may be related to patients' initial choice of medical care system. The factors which seem to have produced the most marked differences are the site of decision to seek medical care, the status of the decision-maker, time taken to make decision after onset of episode, patients' perception of the type of clinical condition required, the time of day and day of week of the decision to seek medical care and the age and sex of the patient.

A further, more comprehensive analysis was carried out in which

each of the above variables which were found to be associated with choice of medical care system were cross tabulated with choice of medical care system and in each case one or both of the circumstantial variables were allowed for. In a preliminary analysis which compared variations in choice of medical system both site of decision to seek medical care and status of decision-taker the results showed that site of decision to seek medical care seemed to produce more marked variations in choice of medical care system than status of decision-taker. If the decision to seek medical care was made at home there was a much greater chance of an attempt to contact a G.P. being made than if the decision was made elsewhere. This trend held irrespective of who made the decision to seek medical care although status of decision-taker did seem to make more difference to outcome when the decision was made in the home than made elsewhere. When the patient or one of his relatives made the decision in the home there was a greater likelihood of an attempt being made to contact a doctor than when the decision was made by another. No such differences occurred when the decision was made outside the home.

In this further analysis, patients perceptions of the emergent nature of their condition, was compared with choice of medical care system allowing for site of decision and status of decision-taker. The results showed little differences between patients perceptions and choice of medical care system when these two circumstantial variables were allowed for. Although when the patient makes the decision to seek medical care outside the home he is more likely to go direct to hospital for emergencies than non-emergencies. No differences were found when another person made the decision outside the home. A similar analysis was carried out separately for both type of condition and time period between onset of episode and decision to seek medical care. In the analysis involving type of conditions marked differences between traumatic and non-traumatic conditions for choice of medical care system were still found when these circumstantial variables were allowed for. In the analysis involving the time period between onset of episode and decision to seek medical care the influence of this variable depended on the site of the decision to seek medical care. In the home little differences were found between speed of

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1. Independent variables were grouped into items each containing two values thus site of decision to seek medical care was grouped into home/other and status of decision-taker into patient or patients' relative/other.

decision and choice of medical care system. However, when the decision to seek medical care wasmade outside the home there was a greater likelihood of the patient going straight to the hospital than an attempt being made to contact a G.P. In both of these latter analyses status of decision taker appears to have only a slight influence on choice of medical care system. For the variables time and day of week of decision to seek medical care for the variable age and sex of patient a similar pattern was found. When the site of the decision to seek medical care was in the home and sex differences in choice of medical care setting and time/day of week differences in choice of medical care setting were marked. However when the site of the decision to seek medical care was made outside the home in each case these differences became markedly smaller. Similarly, for patient orientation to medical care, marked differences in choice of medical care setting were found when the site of decision was at home but these two differences were reduced when the site was elsewhere.

In summary, the results of this more comprehensive analysis suggest that only type of condition still showed marked differences between choice of medical care setting when circumstantial variables were allowed for. With three other variables, time period between onset of episode and decision to seek medical care, time/day of week of decision to seek medical care and age and sex of patient and less consistent trends were found. In each case marked differences in choice of medical care system occured when the site of decisions to seek medical care were made in the home but these differences became less marked when the decision was made elsewhere.

The implications of these findings are that these circumstantial variables, in particular the site of decision to seek medical care, may be significant discriminating factors in the prediction of choice of medical care setting.

2. Influences on the site and timing of the decision to seek medical care

In this section the factors that influence the site of the decision to seek medical care are examined. This is a different question to the one posed in the first section and hinges on the C.S.A's proposition that the presence of certain individuals in certain circumstances will increase the likelihood of a decision to seek medical care being made.

The evidence presented in the previous section has clearly suggested that both the status of the decisionmaker and the site of the decision to seek medical care may play an important part in influencing the initial choice of medical care system.

The outcome variable will be a combination of both the site of the decision to seek medical care and the time period between the episode happening and the decision being made. The latter dimension is added because it brings in an indication of the speed with which the decision was taken and thus it is possible to distinguish between those cases where the decision was made at the site shortly after the episode occurs and those where the decision was made at the site but the decision was delayed, in some cases for a day or more. The analysis in the previous section shows a relationship between time taken to make the decision to seek medical care and choice of medical care system.

The following variables will be used in the analysis to examine their relationship with the outcome variable.

1. Site of episode
2. Status of people with whom the patient had contact at the site of the episode
3. Status of the person who made the decision to seek medical care
4. Type of clinical condition
5. Patient's perception of the emergent nature of the episode

Table 6.15 shows the relationship between the socio-environmental location of the site of the episode and the site of the decision to seek medical care. Results show an interesting pattern. Not surprisingly the home environment was the location where the decision to seek medical care was most likely to be made at the site. In 83.6% of the episodes that occurred in the home a decision to seek medical care was made at the site. It is also interesting to note that in many of these cases there was some delay in making a decision. At other sites, apart from in hospitals, the degree of delay in making the decision at the site was not as marked. For episodes occurring in the street and on the road the percentage of decisions being made at the site was 52.4% and 57.6% respectively but in both cases the degree of delay when the decision was made on site was small. In the case of episodes at work the figure was similar to the two previous described; 60% of episodes occurring at work had a decision to seek medical care made on site, but with these

cases more delays occurred. However, for schools the vast majority of episodes (65%) had a decision to seek medical care made at a site other than the school.

The implication of these findings is that in some locations there was a greater likelihood of a decision being made at the site of the episode than in others. Whether this was due to some aspect of the location itself or to the nature of the episode or who was involved will be examined in the following section.

In the next paragraphs the influence of 'others' on the site of the decision will be examined. Table 6.16 shows those from whom the patient received advice at the site of the episode in relation to the site of decision to seek medical care. The results suggest that whenever the patient received advice from anyone, irrespective of status, there was a greater likelihood of a decision being made at the site than if the patient received no advice. However, the data shows that advice given at the site by police, by other people with medical knowledge and by relatives, friends or neighbours all had a similarly high percentage of cases where the decision was made at the site. The figures for these groups are 78.0%, 83.7% and 80.5% respectively. Thus these figures appear to refute the C.S.A.'s proposition in that one would expect marked differences between all three groups with the police having the highest percentage of decisions made at the site. However, this analysis has yet to take into account other factors such as the location of the episode. As was shown previously decisions to seek medical care were more likely to be made at the site when the episode was in the home than when the episode was elsewhere. This may account for the high percentages of decisions being made at the site after relatives, friends or neighbours have given advice.

These results also suggest an association with advice given and speed with which decision to seek medical care is made. Once again whenever the patient receives advice from anyone the quicker the decision to seek medical care is made. The quickest decisions were made when the sufferer had contact with the police or a bystander.

Table 6.17 shows the status of the decision-taker in relation to the site of the decision to seek medical care. The differences in this table between people in formal positions who made the decisions to seek

medical care and those in less formal positions for site of decision are more marked than that found in Table 6.16. When the police, strangers, employers and teachers made a decision to seek medical care there was a greater likelihood of a decision being made at the site of the episode than when the patients or their relatives made a decision. Also the time period between onset of episode and decision was markedly shorter for the former group than the latter.

There are a variety of explanations of these findings. Firstly, if a policeman, school-teacher or employer makes a decision to seek medical care they are more likely to be called to the site where it happened than to another site such as a home. Secondly, the police or others being called in may reflect the seriousness of the complaint in terms of the incapacity or immobility of the patient or his inability to make a decision. Thus a decision to seek medical care is more likely. Thirdly, and this is related to the C.S.A.'s proposition, when the police or others are involved in decision-making, they are more likely to make a decision at the site because of their lower threshold of 'urgency'.

Tables 6.18 and 6.19 examine the relationship between the type of clinical condition and the site of the decision to seek medical care and the patient's perception of the emergent nature of the episode and the site of the decision to seek medical care.

Table 6.18 suggests a relationship between the type of condition and the site of the decision to seek medical care. For conditions such as strains, sprains, contusions and conditions of a non-traumatic nature there seems a lesser likelihood of the decision to seek medical care having been made at the site than for all the other conditions. Also in the case of fractures, lacerations, burns/scalds and suspected poisoning there was a greater propensity for a decision to seek medical care within a short time of the onset of signs or symptoms. In contrast, a large group of patients suffering from strains, or sprains or from contusions, not only went to another site before a decision was made but also delayed more than 3 hours. The percentages are 27.7% and 20.6% respectively. Similar delays occurred with patients who had non-traumatic complaints. The reasons for these relationships are difficult to describe given the nature of the data presented. Data on the meaning of the different types of complaints for patients is needed

before an attempt is made to understand the reasons for their actions. Table 6.19 shows the perceived urgency of the episode as seen by the sufferer and the site of the decision to seek medical care. The indicator of patients' perceived urgency is the same as that used in the previous section, i.e. their response to the question, 'Did you see this event as an emergency?' These data show differences between perceptions of the emergent nature of the episode and the site of the decision to seem medical care. The non-emergent cases were less likely to have had a decision to seek medical care made quickly after the episode and at the site of the episode than the more emergent cases.

These data suggest that the site of decisions to seek medical care appears to have been influenced by the socio-environmental location of the episode, the type of conditions, whether the patient had contact with anyone at the site or not and the status of the decision-taker and patients perception of the episode as an emergency: the speed with which the decision to seek medical care was made seem to be associated with all the independent variables although more marked variations were found for status of decision-taker, patients perceptions of the emergent nature of the episode, location of episode and type of complaint. There is a suggestion from the data presented in this section that the site of the decision to seek medical care appears to have been influenced by socio-environmental location, type of condition, and whether the patient had contact with anyone at the site or not. The status of the person with whom the patient had contact with at the site seems to be of limited significance on site of patients' decision but was related to the perceptions of the urgency with which medical attention was required and did not seem to be related to the site of the decision to seek medical care suggesting that the patients' perception may have been influenced by other 'circumstantial' elements although there were marked variations between patient perception of urgency and the speed with which decisions to seek medical care were made.

A further more comprehensive analysis was carried out using time period between onset of episode and decision to seek medical care as the 'outcome' variable. This 'outcome' variable was used by itself instead of being in combination with site of decision to seek medical care as it seemed a better indicator of the 'urgency' with which the decision was made. The analysis consisted of the four variables utilised in the previous simple analysis with the exception of who gave

the advice at the site as this variable produced less variation than status of decision-taker and including both would probably involve duplication. The results of an initial analysis comparing using site of episode and status of decision-taker with the outcome variable showed that whilst status of decision-taker produced marked variations when allowing for site of episode the reverse was not so. So in the subsequent analysis only the status of decision-taker was included. The further analysis was carried out separately on type of condition and patients perceptions of the emergent nature of the episodes. With regard to type of condition the results showed that when the decision to seek medical care was made by the patient or his relative more decisions were made within 3 hours of the onset of the episode when the condition was traumatic than with non-traumatic conditions. The findings were reversed when the decision to seek medical care was made by an 'other' person. In the case of patients perception of the emergent nature of the episode marked differences in time between onset of episode and decision to seek medical care were found irrespective of the status of decision-taker.

The results of this analysis suggest that one of the more significant factors associated with the time period between onset of episode and decision to seek medical care is the status of the decision-taker.

Conclusion

In this cahpter two different questions have been examined.

1. What factors influence the initial choice of medical care systems?
2. What factors influence the site and timing of the decision to seek medical care?

It must be re-emphasised that, given the nature of the research design these questions can only be answered partially. However, even within this limitation, the two analyses carried out in this chapter have identified some important possible influences on both 'outcome' variables. These associations have been outlined at the end of each of the sections. With regard to the C.S.A.'s proposals about the significance of circumstances in influencing both 'outcomes', the evidence presented in this chapter has suggested factors such as the site of the decision to seek medical care, and the status of the person who gave advice to the patient or actually made the decision to seek medical care may play a

significant part in influencing the choice of medical care. In the next chapter these aspects of the decision-taking process are looked at in more detail using qualitative data derived from more in-depth interviews.

Table 6.1: Initial choice of care system by socio-environmental site of episode

	Home		Other's Home		School		Hospital		Street		Road		Work		Recreation		Other		No Information		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	108	57.4	32	69.5	25	64.1	9	64.3	47	75.8	42	82.4	58	78.4	28	70.0	38	59.3	26	52.0	413	65.8
Attempt to contact a G.P.	67	35.7	11	23.9	13	33.3	5	35.6	9	14.5	6	11.8	14	18.9	8	20.0	15	23.4	14	28.0	163	26.0
No Infor-mation.	13	6.9	3	6.5	1	2.6			6	9.7	3	5.9	2	2.7	4	10.0	11	17.2	10	20.0	52	8.3
Total	188	100%	46	100%	39	100%	14	100%	62	100%	51	100%	74	100%	40	100%	64	100%	50	100%	628	100%

Table 6.2: Initial choice of care system by whether site of decision to seek medical care was at site of episode or not.

	Decision at Site of episode		Decision at Other site		No inf.		Total	
	No.	%	No.	%	No.	%	No.	%
No attempt to contact G.P.	267	74.6	120	67.4	26	28.3	413	65.8
Attempt to contact G.P.	91	25.4	58	32.6	14	15.2	163	26.0
No inf.					52	51.5	52	8.3
Total	358	100%	178	100%	92	100%	628	100%

Table 6.3: Site of episode, site of decision to seek medical care and initial choice of care system

Initial Choice of care system	Decision at site of episode									Decision not at site				No Information		TOTAL	
	Home	Other's Home	School	Hospital	Street	Road	Work	Recreation	Other	Site of episode outside home: Decision at Home	Site of episode outside home: Decision elsewhere	Site of episode at home: Decision elsewhere					
No attempt to contact a G.P.	91 56.9	25 86.2	12 80.0	10 71.4	32 91.4	31 96.9	38 84.4	21 95.5	21 65.6	63 51.8	19 73.0	40 74.1		10 18.2		413	65.8
Attempt to contact a G.P.	66 41.3	4 13.8	3 20.0	4 28.6	3 8.6	1 3.1	5 11.1	1 4.5	9 28.1	46 42.2	6 23.1	12 22.2		3 5.5		163	26.0
No information	3 1.9						2 4.4		2 6.3		1 3.8	2 3.7		42 76.4		52	8.3
Total	160 100%	29 100%	15 100%	14 100%	35 100%	32 100%	45 100%	22 100%	32 100%	109 100%	26 100%	54 100%		55 100%		628	100%

Table 6.4: The status of the person who made decision to contact the medical care services and initial choice of care system

Initial choice of care system	Parent/ Spouse		Other Relative		Friend/ Neighbour		Stranger		Policeman		Other Public Officer		Employer /Teacher		Personnel with medical knowledge		Patient		Joint Decision		Other		No. Information		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	112	62.6	5	50.0	30	71.4	21	100.0	11	100.0	12	92.3	31	73.8	27	81.8	105	69.5	38	73.1	8	88.9	13	20.0	413	65.8
Attempt to contact a G.P.	65	36.3	5	50.0	12	28.6					1	7.7	8	19.1	4	12.1	44	29.1	14	26.9	1	11.1	9	13.8	163	26.0
No Information	2	1.1											3	7.1	2	1.3	2	1.3					43	66.2	52	8.3
Total	179	100%	10	100%	42	100%	21	100%	11	100%	13	100%	42	100%	33	100%	151	100%	52	100%	9	100%	65	100%	628	100%

Table 6.5: Patient contacts and initial choice of care system

	Police		Employer /Teacher		Bystander		Person with medical knowledge		Relative/ Friend		Other		No-one		No Information		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	18	75.0	50	66.7	35	81.4	36	50.0	133	63.3	30	83.3	69	67.6	42	63.6	413	65.8
Attempt to contact a G.P.	3	12.5	18	24.0	6	14.0	30	41.7	56	26.7	5	13.9	24	23.5	21	31.2	163	26.0
No Information	3	12.5	7	9.3	2	4.7	6	8.3	21	10.0	1	2.8	9	8.8	3	4.6	52	8.3
Total	24	100%	75	100%	43	100%	72	100%	210	100%	36	100%	102	100%	66	100%	623	100%

Table 6.6: Patients perception of the emergent nature of the episode and initial choice of care system

Initial Choice of Care System	Did patient define episode as an emergency ?						TOTAL	
	Yes		No		No Information			
	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	257	71.6	147	69.7	9	15.5	413	65.8
Attempt to contact a G.P.	96	26.7	62	29.4	5	8.6	163	26.0
No Information	6	1.7	2	0.9	44	75.9	52	8.3
Total	359	100%	211	100%	58	100%	628	100%

Table 6.7: Clinical assessment of urgency by initial choice of care system

Initial Choice of Care System	Clinical Assessment of Urgency of Patient's Complaint.										TOTAL	
	Emergency		Urgent Treatment Required in 6 hrs.		Non-urgent Treatment Required Between 6-48 hrs.		Non-urgent Treatment not Required Within 48 hrs.		No Information			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	26	72.2	184	70.8	160	59.7	18	62.6	25	71.4	413	65.8
Attempt to contact a G.P.	5	13.9	51	19.6	86	32.1	11	37.4	10	28.6	163	26.0
No Information	5	13.9	25	9.6	22	8.2					52	8.3
Total	36	100%	260	100%	268	100%	29	100%	35	100%	628	100%

Table 6.8: Length of time between onset of episode and decision to seek medical care and initial choice of medical care system

	< 3 hrs.		3 < 6		6 < 12		12 < 24		24 < 48		48 hrs +		No Information		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	263	76.2	31	75.6	26	65.0	30	66.7	20	54.1	26	47.2	17	26.2	413	65.8
Attempt to contact a G.P.	77	22.3	10	24.4	13	32.5	14	31.1	16	43.2	28	50.9	5	7.7	163	26.0
No information	5	1.4			1	2.5	1	2.2	1	2.7	1	1.8	43	66.2	52	8.3
Total	345	100%	41	100%	40	100%	45	100%	37	100%	55	100%	65	100%	628	100%

Table 6.9: Initial choice of care system and diagnostic classification

Initial Choice of Care System	Diagnostic Classification																					
	Fractures		Sprains and strains		Lacer-ations		Contu-sions		Burn/ Scald		Foreign body		Poisoning		Non-Trauma		No Infor-mation		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	37	54.5	56	67.5	120	76.4	67	69.1	10	62.5	26	55.3	6	60.0	52	54.7	39	70.9	413	65.8
Attempt to contact a G.P.	28	41.2	22	26.5	21	13.4	23	23.7	3	18.8	17	36.2	2	20.0	31	29.5	16	29.1	163	26.0
No Infor-mation	3	4.4	5	6.0	16	10.2	7	7.2	3	18.8	4	8.5	2	20.0	12	11.4			52	8.3
Total	68	100%	83	100%	157	100%	97	100%	16	100%	47	100%	10	100%	95	100%	55	100%	628	100%

Table 6.10: Diagnostic classification, initial choice of care System and patients place of residence

Diagnostic classification of conditions	Patients permanent address in local area				Patients permanent address outside local area				No Information		TOTAL	
	Attempt to contact a G.P.		No Attempt to contact a G.P.		Attempt to contact a G.P.		No Attempt to contact a G.P.					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Traumatic complaint	110	73.3	270	78.7	6	46.2	51	73.9	40		477	76.0
Non-Trauma	28	18.7	41	12.0	3	23.1	11	15.9	3		86	13.7
No Information	12	8.0	32	9.3	4	30.8	7	10.1	10		65	10.4
Total	150	100%	343	100%	13	100%	69	100%	53		628	100%

Table 6.11: Initial Choice of Medical Care and day and time of decision to seek medical care

Initial Choice of Medical Care	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		No Information	Total	
	9am-6pm	Other	9am-6pm	Other	9am-6pm	Other	9am-6pm	Other	9am-6pm	Other	9am-6pm	Other	9am-6pm	Other		9am-6pm	Other
No attempt to contact a G.P.	31 70.5	29 80.6	31 64.6	20 90.9	29 63.0	20 76.9	23 57.5	28 73.7	29 69.1	15 65.2	36 87.8	26 76.5	38 77.6	21 91.3	35	232	181
Attempt to contact a G.P.	13 29.5	7 19.4	17 35.4	2 9.1	17 37.0	6 23.1	17 42.5	10 26.3	13 31.0	8 34.8	5 12.2	8 23.5	11 22.4	2 8.6	27	110	53
No Information															52	20	32
Total	44 100%	36 100%	48 100%	22 100%	46 100%	26 100%	40 100%	38 100%	42 100%	23 100%	41 100%	34 100%	49 100%	23 100%	114	362	266

Table 6.12: Initial choice of care system and age and sex of patient

Choice of Medical Setting	MALE										FEMALE										No Information		TOTAL	
	0-4		5-14		15-44		45-64		65-97		0-4		5-14		15-44		45-64		65-97					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	20	71.4	39	68.4	161	71.6	22	64.7	13	56.5	7	38.9	28	68.3	58	66.7	21	60.0	15	42.9	29	64.4	413	65.8
Attempt to contact a G.P.	8	28.6	13	22.8	38	16.9	7	20.6	10	43.5	10	55.6	12	29.3	24	27.6	10	28.6	15	42.9	16	35.6	163	26.0
No Information			5	8.8	26	11.6	5	14.7			1	5.6	1	2.4	5	5.7	4	11.4	5	14.3			52	8.3
Total	28	100%	57	100%	225	100%	34	100%	23	100%	18	100%	41	100%	87	100%	35	100%	45	100%	45	100%	628	100%

Table 6.13: Initial Choice of Medical Care System and Patient Orientation to Medical Care

Initial Choice of Medical Care	G.P.						Accident Centre						Other						No Information		TOTAL	
	Go to Dr.		Go to Hosp.		Uncertain		Go to Dr.		Go to Hosp.		Uncertain		Go to Dr.		Go to Hosp.		Uncertain					
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	61	53.0	194	76.7	17	73.9	3	100%	25	96.2			11	91.7	67	97.1	4	57.2	4		386	61.5
Attempt to contact a G.P.	54	47.0	59	23.3	6	26.1			1	3.8			1	8.3	2	2.9	3	42.9	19		145	23.1
No Information																			97		97	15.4
Total	115	100%	253	100%	23	100%	3	100%	26	100%			12	100%	69	100%	7	100%	120		628	100%

Table 6.14: Initial Choice of Care System and Use of Casualty in Past Year

Previous use of accident centre in past year

Initial Choice of Care System	None		Once		Twice		No Information		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
No attempt to contact a G.P.	282	69.3	91	75.2	31	75.6	9	15.3	413	65.8
Attempt to contact a G.P.	118	29.0	30	24.8	10	24.4	5	8.5	163	26.0
No Information	7	1.7					45	76.3	52	8.0
Total	407	100%	121	100%	41	100%	59	100%	628	100%

Table 6.15: Site of decision to seek medical care, and location of episode

Initial choice of medical care		Home		Other's Home		School		Hospital		Street		Road		Work		Recreation		Other		No Information		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Decision at site	Within 3 hrs of episode	108	57.1	26	55.3	12	30.0	8	53.3	30	47.6	28	53.8	34	45.3	17	41.5	26	40.0			289	46.0
	More than 3 hrs of episode	50	26.5	3	6.9	2	5.0	4	27.7	3	4.8	2	3.8	11	14.7	3	7.3	4	6.2	1	2.4	83	13.2
No decision at site	Within 3 hrs of episode	15	7.9	10	21.3	13	32.5			14	22.2	10	19.2	10	28.6	5	12.2	15	23.1			92	14.7
	More than 3 hrs of episode	12	6.3	7	14.9	12	30.0	1	6.7	11	17.5	9	17.3	19	25.3	13	31.7	16	24.6			100	15.9
No Information		4	2.1	1	2.1	1	2.5	2	13.3	5	7.9	3	5.8	1	1.3	3	7.3	4	6.2	40	97.6	64	10.2
Total		189	100%	47	100%	40	100%	15	100%	63	100%	52	100%	75	100%	41	100%	65	100%	41	100%	628	100%

Table 6.16: Patient contacts at site of episode and site of decision to seek medical care

Site of Decision		No advice at site		Advice at site by police		Advice at site by employer/ school teacher		Advice at site by person with medical knowledge		Advice at site by bystander		Advice at site by relative, friend, neighbour		Advice at site by other		No Information		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Decision at site	Within 3 hrs. of episode	90	34.4	9	64.3	28	53.8	40	65.6	15	65.2	89	64.0	17	60.7	1	2.1	289	46.0
	More than 3 hrs. of episode	34	14.9	2	14.3	4	7.7	11	18.1	2	8.7	23	16.5	1	3.6	1	2.1	83	13.2
No decision at site	Within 3 hrs. of episode	54	20.6	3	21.4	10	19.2	2	3.3	5	21.7	15	10.8	1	3.6	2	4.3	92	14.6
	More than 3 hrs. of episode	71	27.1			9	17.3	4	6.6			7	5.0	8	28.6	1	2.1	100	15.9
No Information		8	3.1	2	14.3	1	1.9	4	6.6	1	4.3	5	3.6	1	3.6	42	89.4	64	10.2
Total		262	100%	14	100%	52	100%	61	100%	23	100%	139	100%	28	100%	47	100%	628	100%

Table 6.17: Status of decision taker and site of decision to seek medical care

Site of Decision		Parent/ Spouse		Other Relative		Employer /Teacher		Friend/ Neigh-bour		Stranger		Police-man		Other Public Official		Person-nel with medical knowledge		Patient only		Joint Decision		Other		No Infor-mation		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Decis-ion at site	Within 3 hrs. of episode	81	45.0			28	66.7	21	50.0	15	75.0	8	72.7	10	76.9	16	50.0	55	36.2	34	65.4	8	80.0	13		289	46.0
	More than 3 hrs. of episode	24	13.3			2	4.8	4	9.5	1	5.0			1	7.7	7	21.9	35	23.0	4	7.7			5		83	13.2
No decis-ion at site	Within 3 hrs. of episode	39	21.7	4	40.0	5	11.9	13	31.0			2	18.2			4	12.5	20	13.2	5	9.6					92	14.6
	More than 3 hrs. of episode	30	16.7	5	50.0	5	11.9	4	9.5	1	5.0	1	9.1	2	15.4	5	15.6	42	27.6	5	9.6					100	15.9
No Information		6	3.3	1	1.0	2	4.8			3	15.0									4	7.7	2	20.0	46		64	10.2
Total		180	100%	10	100%	42	100%	42	100%	20	100%	11	100%	13	100%	32	100%	152	100%	52	100%	10	100%	64	100%	628	100%

Fig. 5.1 Pathways To The Accident and Emergency Department.

Where pathway ends signifies Nil Individuals

Where pathway continues but no percentage shown the percentage is less than 1·0 %

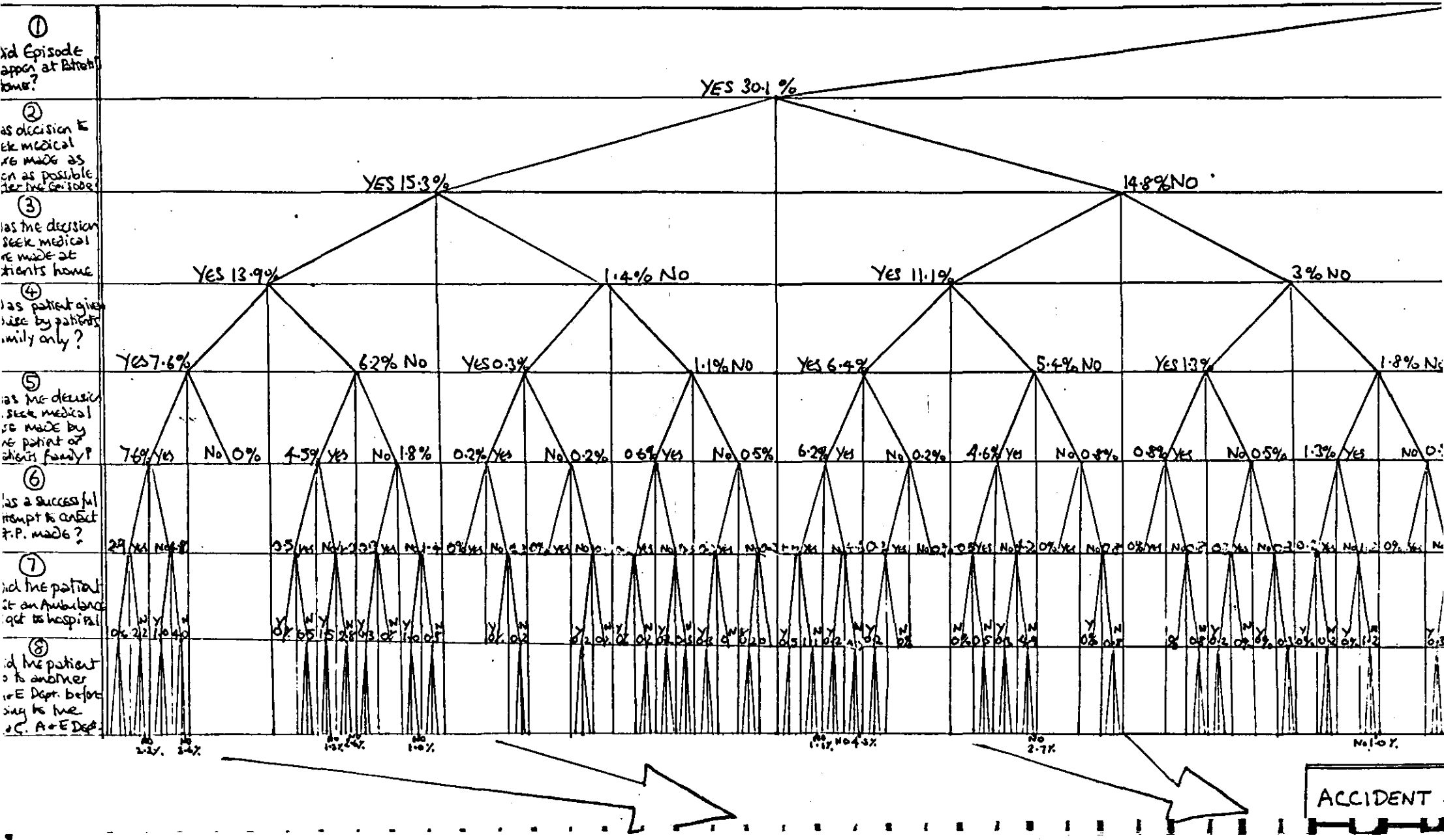

Table 6.18: Site of decision to seek medical care and diagnostic classification

Site of Decision		Fractures		Strains/ Sprains		Lacerations		Contusions		Burn/Scald		Foreign body		Poisoning		Non-Trauma		No Information		TOTAL	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Decision at site	Within 3 hrs. of episode	39	55.7	26	31.3	92	58.6	41	42.3	9	56.3	20	42.6	6	66.7	29	30.2	27		289	46.0
	More than 3 hrs. of episode	5	7.1	17	20.5	6	3.8	11	11.3	2	12.5	9	19.2			24	25.0	9		83	13.2
No decision at site	Within 3 hrs. of episode	12	17.1	11	13.3	27	17.2	15	15.5	1	6.3	6	12.8	1	11.1	14	14.6	5		92	14.6
	More than 3 hrs. of episode	12	17.1	23	27.7	10	6.4	20	20.6	3	19.0	6	12.8			14	14.6	12		100	15.9
No Information		2	2.9	6	7.2	22	14.0	10	10.3	1	6.3	6	12.8	2	22.2	15	15.6			64	10.2
Total		70	100%	83	100%	157	100%	97	100%	16	100%	47	100%	9	100%	96	100%	53		628	100%

Table 6.19: Site of decision to seek medical care and patients' evaluation of the emergent nature of the episode

Site of Decision		Did the patient define the episode as an emergency ?				No Information	Total	
		Yes		No				
		No.	%	No.	%		No.	%
Decision at site	Within 3 hrs.	185	51.5	79	37.4	-	264	42.0
	Over 3 hrs.	51	14.2	44	20.9	-	95	15.1
No decision at site	Within 3 hrs.	54	15.0	17	8.1	-	71	11.3
	Over 3 hrs.	53	14.8	65	30.8	-	118	18.8
No Information		16	4.5	6	2.8	58	80	12.7
Total		359	100%	211	100%	58	628	100%

Chapter 7

Referral of patients to an Accident and Emergency Department

In the previous chapter the analysis suggested that the site of the episode, the site of the decision to seek medical care and the involvement of others in the decision-taking procedure play a part in influencing the choice of medical care setting. The analysis also examined the influences on timing and the site of the decision to seek medical care and the results suggested that the site of episode and the involvement of others in giving advice and decision-making may be influential.

In this chapter, the aim is to examine why these relationships might exist. The analysis focuses on five socio-environmental locations where episodes occurred. They are as follows: School,Work, Street or Road, Recreation area and the Home. The subjects which are used in this chapter are taken from the sample in the main study. Some of the cases were selected for intensive interview not on a random basis but rather according to the place where the injury or episode of illness occurred. In each of these cases an interview was carried out with both the patient or patient's representative and the teacher, employer, policeman or other who was also involved.

In this chapter two specific questions are examined.

1. Why should the presence of a policeman, teacher, employer or other at a site of an episode or a site of decision to seek medical care influence the choice of medical care system?
2. Why should the presence of a policeman, teacher, employer or other at a site of an episode lower the threshold with which medical care is required?

1. Position of teachers and personnel of educational institutions

In a number of cases the patient was a school-aged child who injured him or herself or became ill at school. Thus in many of these cases the staff of the school became involved in deciding what the appropriate course of action would be. The word 'involved' is used because in some cases the 'episode' occurred at school and the child

was taken directly to hospital, in other cases the child's parents were contacted and the child was taken home for the decision to seek medical help to be made, and in other cases the episode occurred at home but a teacher decided that medical attention was warranted.

The method of analysis is as follows. A number of cases from the main sample were selected for study. In each case an interview was carried out with the child and parent (if possible) and a member of the school staff. These interviews were tape-recorded and transcribed. From the two interviews a 'case' history was constructed outlining the history of the event and including the explanations offered by the different people involved.

The interviews with the parents and child took the form of the semi-structured interview which took place with all the respondents in the general sample. The interviews with teachers were less structured and focused around the 'episode' as well as how the course of action compared with what they 'normally' did so as to build up a picture of the different strategies that teachers used to deal with such 'episodes'.

The problem posed for the analysis is if, as the evidence suggests, there is an association between contact with a public official and choice of medical treatment, why such an association exists. Is it, as the C.S.A. suggests, that the official brings to the situation another set of priorities, associated with factors other than the condition of the sufferer, which cause the decision to seek medical help to be made at the site, and the accident centre or the use of an ambulance to be seen as more convenient? Alternatively, is it because officials have a training in first-aid which gives them a more 'expert' understanding in medical terms of the illness or injury, and hence a different understanding of the possible risks to the victim of not receiving medical attention. Their propensity to think 'medically' may lead to their seeing the need for medical attention far more often than if they relied entirely on 'commonsense' knowledge.

Ideally, to examine the propositions more rigorously a random sample of all schools in the area should be selected in order to compare schools in terms of their policies as well as being able to allow for the influence of such organisational aspects as size of school, provision of medical facilities, type of school, which all must play some part.

In this study only those schools where a pupil ended up at the accident centre have been selected and whether they are representative of all schools in the vicinity is open to question. This problem applies also to the following sections on employers, the police and other settings.

In all, 42 'episodes' were identified as either occurring on the premises of an educational institution such as a school, training college or university or a representative of either of these institutions had spoken with the sufferer about their condition after the 'episode' had taken place.

Table 7.1 shows the pathways that these patients took to the Accident Centre but five cases are excluded because they involved teaching staff or other adults who were not affiliated to these establisheents in any way. Three of these were teaching members of staff who injured themselves at school. All three went home after the episode. Two of them decided at home that medical help was needed: one went straight to the accident centre the following morning and the other contacted the nearest G.P. in the area where he lived (he has recently moved and was not registered with a G.P. in that area). The practice receptionist referred him to hospital. The third teacher went to school the following day but had to go to AED from school as his condition became worse. The other two excluded cases involved a delivery man injuring himself at a school whilst unloading his lorry. He was treated by the school secretary and it was suggested that he went to the accident centre which he eventually did. The final case of the five involved an adult who was on holiday staying at the University. She was referred to the Accident Centre by the University doctor.

Results in Table 7.1 show that in 12 (34%) of the 37 cases a G.P. was contacted and only one of these contacts occurred at the site of the episode. The remaining cases involved the parents attempting to contact a G.P. from home after the child had been taken home by the parents or by the teaching staff. The one case where the decision to seek medical care was made at school and an attempt was made to contact a G.P. is complicated. The headmaster decided that medical help was needed, and the father was sent for, but before the father went to the school he rang his G.P. to ask for advice. The G.P. supported the headmaster's judgement so the father went to the school and took the child to the

accident centre. Although it appeared that the headmaster in this case made the decision to go to the accident centre, the course of action was dependent on the father's agreement which in itself meant referring to his G.P. for advice.

In Table 7.1 contact with an educational representative is identified as a potentially important influence on the patient's action. However, the notion of contact varied markedly. For example, in eight cases where the episode occurred at school the school staff made the decision to contact the medical services by themselves, delaying contacting the parents until after they went to the medical services or not being able to contact them at all. In four of these cases the decision for referral was made by a nurse who was resident at the institutions. Two were in boarding schools and two in further education establishments. In none of the cases, therefore, were there any parents accessible and the decision had to be made by a representative of the school. In all four cases the nurse referred the sufferer to hospital, but in three cases there was some delay between treatment by the nurse and the actual decision to go to hospital. This was due to the nurse giving instructions but not taking the sufferer to hospital. With smaller children the situation was different and the sufferer was taken to the accident centre by one of the staff. This occurred in four cases and none of these schools had anyone professionally medically trained. Usually, a physical education teacher acts as first-aider with basic St. John's training, but there are generally limited medical facilities. More detailed data are available on three of these cases as interviews were carried out with members of staff involved.

One case involved a boy who was attending a special school for educationally subnormal children. He suffered from epilepsy and after a fight with other children on the school field he had a fit and went into a coma. He was taken to the medical room and observed by a welfare assistant. The procedure in the school for coping with children having fits (there are 12 children in the school diagnosed as epileptic) is to observe them and, if they come out of the attack within a reasonable period of time, the parent is written to and the parent then refers them to a family doctor. If the attack is excessive, and according to the headmaster it was in this case, this is the procedure:

> "If the child is out for an excessive period of time, by out I mean unconscious in a coma, then we feel that we are not medical practitioners, that we do need the child under skilled medical supervision, because although we watch for signs of blueness or oxygen starvation, this is a matter really for medical people to determine ... So we then would send for the ambulance and have the child taken up to the hospital and send the welfare assistant with the child and the child's school medical record. At the same time attempting to contact the parents and letting them know. In cases of normal illnesses, then we would contact the parent and ask them would they arrange to take the child home and see the doctor that evening".

In this case the ambulance was called. The headmaster went on:

> "We called the ambulance because we thought he had been out for long enough. A message was sent to the mother informing her of what had happened and asking her to come up to the accident centre and pick him up".

The mother did this but suggested that the school staff had over-reacted. She said:

> "Apparently he was in a fight with another boy and because he was unconscious they took him to the K. and C. He suffers from serious epilepsy and although I am used to it and can cope with him, the school get frightened and send him to K. and C..... He probably had a minor attack and they couldn't bring him round..... I did not worry because he's been taken to the Accident Centre before and when I had the message that he was there I didn't hurry to fetch him because I'm used to it.... He wouldn't have worried about it".

The mother said that on two previous occasions when he had been taken to the accident centre he should have been brought home. She suggested that the reason why staff did take him to hospital was that they panicked and "because he wasn't their child - they were playing safe".

The headmaster, well aware of the mother's opinion, said that the staff do panic but not as much as they did and offered a further explanation -

> "... you see the school has to exercise a greater than average caring attitude. I mean the courts are quite clear about this, you not only have to act as a good parent would but as the best sort of parent would".

Clearly then, this pattern of action was coloured by socio-legal conditions and parental opinion played no part in the course of action that followed.

A second case occurred at a nursery school. The child cut his head

whilst playing at the school. This was the second time he had injured himself in a week. A member of staff recounted how these injuries happened.

> "It was not the first time that he did it, because he banged his head once and it came up in a big bump, because they were running around" No one was contacted, "because it was just a bump and he just had a slight cut and so we just put pressure on it with cotton wool and it eventually stopped bleeding and we just put a plaster on top of it... I didn't think it was serious. It was a cut then, but the second time, you see I don't know but he managed to do it in exactly the same place. He was running along here, tripped over someone on a bike and landed on the wall, that time at exactly the same place so it reeally opened it, making it deeper and then because it came up in such a colossal bump".

The staff actually saw the accident happen.

> "I saw him fall over and as he got up the blood was coming down his face but you couldn't tell until he got up and he was coming towards me".

The member of staff immediately carried the boy into the office.

> "He was crying and I carried him into the office, because that's where all our medical things are and I think he was a bit frightened because it was bleeding so much and then the deputy head said, 'I think you ought to take him up to check over and make sure he's alright' because it had come up into a nasty bump and it had re-opened the cut that had already started to heal".

The school does not have a nurse but has first-aid facilities.

> "Usually they are just minor grazes or cuts and bumps so we've got witch-hazel and lint and savlon and various antiseptic ointments. We usually just administer things ourselves, but in that case we were worried. It all re-opened up and he had such a big bump, and as they are not our children we wanted to cover ourselves, so we decided to do that...".

The legal position of the staff at this school is complicated by the type of child that is in the school.

> "We have an accident book here because a lot of the children that come here are children that are at risk at home so if they have an accident on the premises, it's always written down and someone signs it and if someone else has been out in the garden and was there at the time they witness it".

The member of staff went on to say that the child in this case was on the

'at risk' register because he had been beaten by his parents.

> "But it was only the once. So this is the case with a lot of children, that's why we always keep an accident register. We write it down so that we know that it happened at the nursery".

In talking to the matron of the same nursery school it became evident that for injuries a G.P. is hardly ever contacted. For example:

M.C. "What would you normally do with an accident like this?".

Matron "Exactly what we did do. Take them to casualty" .

M.C. "Do you think of contacting their G.P. or anything?".

Matron "No, because we feel that it's our responsibility, it has happened on our premises. I mean it depends what it is... I mean, things like a cut on the head or I mean we've had a child who's been knocked with a swing and cut his head open, and we've just popped him up, you know".

The staff gave the impression that in theory they would try and contact the parents when the child hurt himself but the practical circumstances limit it. The Matron said:

> "I mean we've no way of getting hold of parents at all. If we can 'phone them at work if we know the work telephone number, but I mean they're always changing jobs or doing something so we never know. I tried to reach one the other day and the 'phone was cut off, so you know you're back to square one".

The other member of staff also hinted that they tended to go to the hospital without contacting the parents. In this particular case the sister at the hospital sent a policeman around to contact the parents. The member of staff said this about the parents' arrival at the hospital:

> "Yes. They were worried because I don't know what the policeman said, you see I expect they were worried and I said, 'I'm awfully sorry to drag you out but they (the hospital) wouldn't see us' because there wasn't anything done at the time and they were quite worried but it was obviously because they didn't know the extent of the injury".

In this case the child was taken to the accident centre immediately after the accident happened and the member of staff who took him waited with him at the hospital until his parents arrived before going back to the school. Throughout the interview the staff emphasised the need always to have a child examined. The matron mentioned an insurance risk because they had to play safe in case there were further enquiries about an injury. She also

said that none of the health visitors or social workers (which most of the children and their families have) are ever available and the hospital is the only place to which they can go.

The third case also involved a school taking the decision to seek medical help, once again going to the accident centre, but in this case no attempt was made to contact the parents. Both child and parents thought the trip to the hospital was unnecessary. The child thought the mother could have dealt with it and the mother thought she could have gone to the health centre, commenting that 'they do everything there'.

In this case, a thirteen year old girl injured herself.

> "I slipped when I was walking to school. It was wet and my foot slipped out of the clogs I was wearing".

This incident happened at 7.55.a.m. and the girl went on to her school. During the morning it became painful and she was taken to a teacher who was in charge of first-aid. The first-aid person said,

> "She came to me at break at about ten-thirty saying her ankle was hurting her, in actual fact two other second-years carried her up".

The first-aid person examined it and said,

> "It was obviously swollen. I just treated it for a sprain. We did a cold compress, put it in cold water, bandaged it for her which made it more comfortable".

The girl then went back to her classes but had difficulty walking and her friends carried her around the school. In the afternoon the domestic science teacher called the first-aid person to come and look at the girl's injury again because obviously it was uncomfortable.

> "We took the bandage off that we had put on and she said it felt better. Again I thought it wss just swollen up and she still was not walking very well on it so we took her up just as a precautionary measure".

The girl on the other hand felt her injury wasn't at all serious. She said,

> "I just sprained it. I didn't want to go to hospital. I didn't think it was at all necessary but my teacher made me".

She did mention that it was very painful. The first-aid person (P.E. teacher)

said that the girl did not want to go to hospital,

> "but as far as we are concerned we take the view that rather be safe than sorry".

The teacher's reason for sending the child to hospital involved a combination of explanations which included both 'medical' and 'social' influences. Firstly, she emphasised the medical aspects.

> "Well, it's very easy to disregard a symptom which you are not capable of recognising".

And, secondly, she mentioned both the legal and social position. She said,

> "I don't think there would be a legal position if it involved an accident coming to school. Certainly any accident that happens in school we have a certain amount of responsibility for".

She went on to describe why she wouldn't have gone to the Accident Centre if she had been involved in a similar incident,

> "As far as I am concerned, I am an adult and I am responsible for myself and the child is not responsible for itself and I think we are here in loco parentis".

The first-aid person then went on to say how, when she had first seen the girl in the morning, she had told the girl that she must tell her mother what had happened and that she ought to go to her G.P. that evening. However, she went to the hospital

> "because it was uncomfortable in the afternoon for her. I thought she might have chipped something or broken something that we hadn't recognised, so she went for an x-ray, but we would always take a child for an x-ray if there was any possibility of there being a break".

In nine of the 37 cases occurring at school the influence of the teaching staff's decision was limited by the involvement of the parents in consultation. The nature of the consultation varied according to how strongly the staff felt that action to seek medical care was needed. In some cases the teaching staff attempted to make sure that what they thought was appropriate was carried out. In one case a young boy, attending a state secondary school, injured his right wrist whilst playing in the school playground. It disrupted his activities at school so the deputy Head looked at it. He said,

> "I thought he had probably sprained his wrist... he said that it hurt. He appeared to be able to move it but it did have some signs of swelling, mild signs of swelling. I thought probably a bad sprain".

The deputy head then went on to elaborate a theory of his own about wrist injuries,

> "Well now, with the wrists one never knows. They are funny things aren't they. Anything wrong with the wrist or any apparent injury to a wrist I"m usually very careful. I'm willing to go to treat it even if my inclination is to say well maybe it's just a twist or something like this. Because a bad fractured wrist can be a very long and difficult process".

In this particular case the normal procedure of trying to contact the parents was carried out and the mother came to the school. The boy with Mum was then taken to the hospital. According to the deputy head he was the one who made decisions to go to the hospital and the mother also said he made the decision. However, the mother said that she rang the hospital first, probably from home,

> "because I wasn't sure if I had to have a letter from my G.P."

The mother, in this case, had accepted the school's decision but wasn't sure if going directly to hospital was the correct procedure given the decision to go to hospital.

In another case, the form of 'contact' between parents and school occurred in the form of a letter giving advice. This action by the headmaster reflected his distinctly different policies for dealing with episodes of injury or illness which occur on the premises and those that begin off the premises. In this particular case there were conflicting accounts of how the injury occurred. The child said that she had bruised her right arm whilst playing on the playground at school. In contrast the headmaster said;

> "If a child comes to school and obviously has an injury or a disability that has been caused outside the school, but which has not been receiving any medical treatment from the family doctor or because Mum has been reluctant to take her to hospital, then I am automatically informed of this. This child was one of these children. In fact she apparently had hurt herself over the weekend and complained to Mum about her arm heing sore and she was having difficulty in lifting it. Mum had said it's nothing to worry about but she had complained to us about three times in one particular day and consequently the school secretary called me in and I decided that she should be referred to hospital and wrote to her

> Mum to tell her I thought she should either be taken to the doctor or up to the Casualty Department'.
>
> If the injury had occurred at school there would have been no doubt. My policy is, get in the car son, and he goes in the car and then when I visit the home, then the principle that I adopt is that the child stays in the car. I simply go to the door and say, your child needs hospital treatment, I am prepared to drive you to the hospital, he is already in the car, can you please come along as quickly as you can. I will wait in the car for you".

In this case, because of the circumstanc es that the headmaster believed surrounded the 'accident' he took a more passive stance and left the decision up to the mother. The mother took the child to hospital immediately as she thought the arm might be broken. She didn't contact her G.P. because he didn't have a surgery that evening and anyway she thought that he would have sent her for an x-ray. The family's normal way of coping with matters of health is to go to the mother's G.P. and if he is not available to go to her husband's G.P. However, in cases of emergencies and injuries they go straight to hospital.

There are two other types of cases where an incident occurred at school. There are those cases, eight in number, where the sufferer or sufferer's parents were not given any advice about a course of action, and those cases, five in number, where the 'episode' occurred on the site of premises of an educational institution without any contact with a representative of that institution.

Considering the former group first, detailed information is available for two cases. In one case an eight-year old boy hit his head on a desk in the classroom during playtime. It was a rainy day and the children couldn't go out to play so they were in the classroom. The child's teacher was present and the teacher said this:

> "He told me exactly what he was doing. You know he ran across the classroom, someone was chasing him and he fell over and he said it didn't even seem to hurt, he said it didn't hurt... It was quite a large lump. It had a blue line down the middle - I said you're very lucky because if that had split open it would mean hospital because it would have needed stiches".

She said that this kind of thing happened regularly in the classroom but she only took them along to the hospital if the skin had broken and a stitch was needed.

It seems that the teacher was cautious about 'any child that has had

a bang on the head' and so she took him to the headmaster. The headmaster said this:

> "The deputy head was also present who very often takes responsibility for accidents and the three of us felt that this was not serious enough for him to go home immediately or certainly to be taken to hospital because he was perfectly bright and he looked quite normal and didn't seem to have any symptoms... The one thing I felt on reflection that I would have done is to inform the parents. I think that I should have 'phoned or written immediately.... not written, rather sent a message immediately so that they knew, but instead we told the boy to tell his mother because we felt that he wasn't very seriously hurt".

The teacher said that with head injuries they always take special precautions:

> "He wasn't allowed out to play for the rest of the day and at dinner time he was given into the care of a dinner lady to keep a special watch on him and to come to me immediately if she saw any change in his condition".

The headmaster had recently joined the school and was uncertain as to whether any of his staff had been trained specially in first aid. He did say that although he had no training in first aid, teachers had instructions from the County on how to deal with accidents and first-aid boxes were in various positions around the building.

The child carried on as usual and went home at the normal time. The father said the child was 'as bright as a button' until bedtime. The deputy head had sent a letter telling them to watch him in case there was any delayed reactions. The parents saw blood in the child's ear and rang their G.P. immediately. The father said he couldn't have put off contacting the doctor because:

> "as soon as I saw blood from his ears, I know enough about first-aid to realise urgent treatment was required".

The father rang the G.P. and was referred to the hospital.

In another case, a similar pattern was found. This seventeen year old boy tripped over steps in the hall of the school and twisted his ankle at about 9.a.m. in the morning. He went to do P.E. and he was sent to the first-aid person who bound it up and then telephoned for mother to take the boy home. The person responsible for first aid, one of the clerical staff, said:

> "He came with a swollen ankle saying he had tripped up two steps in the hall... I looked at it and it didn't seem to be too bad to me at the time, and he didn't say it hurt particularly, didn't say he'd banged it at all, he just said he'd tripped up the steps. It wasn't terribly swollen so I just put a crepe bandage around it and said, as far as I can remember his mother collected him. We telephoned the mother and she came and collected him and I believe she brought him into the hospital".

The first-aid person said she didn't think his injury was serious.

"Just the puffed-up ankle... all his toes wriggled and he was able to walk on it.

She went on:

> "I didn't suggest hospital. The mother came, I know the mother personally. She used to be an Air Hostess and I think she was more qualified than I am to look at her son".

The first-aider wasn't aware that the mother took her son home and visited her G.P. the following morning. The G.P. referred him to the accident centre for an x-ray.

Interestingly, of the five cases which occurred on school premises no contact with a representative of the school was involved, only one parent contacted their G.P. even though all five children went home first to see parents. In one case the boy received advice from his sister who is a nurse and was told to go to AED. The findings suggest that although parents are more likely to go to a G.P. when the decision is made at home, their decision also seems to be related to whether they had contact with a teacher or staff member. Certainly, teachers seldom gave advice to go specially to a G.P. and tended to leave the decision up to the parents.

In other cases where the incident did not happen at school but a school representative was there, three episodes occurred at festivals or sports' occasions organised by the local schools. One child was referred direct from the site to the AED by the St. John's Ambulance. One child was at the school camp in the locality. A nurse at the camp treated the child and the leader rang up the mother and asked her to come and take the child to hospital. Another child was at Cubs and cut his leg. The child was taken home to his mother, who was a trained nurse and she rang her G.P.

These data seem to suggest that teachers either send children directly to hospital or send them home. The G.P. plays a part only when the parent is involved and the decision is made outside the school grounds. Also of all those for whom a decision was made at the site, there was contact with

a teacher representative. This, however, does prove that contact with a teacher will bring more urgency to bear as teachers may have to make these decisions. Some of these decisions however were against the views of pupils and parents.

Why then do teachers adopt the policy of using accident centres instead of G.P.'s, and how do they explain their assessment of urgency? The following explanations are taken from interviews with teachers about the specific cases already discussed and also about their routine policies.

Policies of schools for dealing with illness and injury

There are two specific questions that will be attempted to be answered in this section:

1. Why do schools prefer to use an accident centre and not G.P.'s?
2. Why is the teacher's threshold of urgency lower than parents? Is it because of their 'greater' medical knowledge or do socio-legal conditions play a part?

Considering the first question, it appears that the schools in their everyday workings mainly have to deal with injury rather than illness. 'Emergencies' are much more likely to involve children with injuries rather than illness as it is on these occasions that the staff feel medical treatment is required. So it is mainly to accidents that they refer although sometimes this distinction between injury and illness is not as clear cut as they describe. References are made by staff to that time we used the ambulance 'when the child had a fit' and when an ambulance was called, implying that ambulances are used for emergencies irrespective of the complaint.

In one case the teachers explained that their reason for not going to the doctors instead of casualty was because the hospital has the appropriate facilities.

> "You see the school is mainly concerned with injury, and injury involves an x-ray, consequently the doctor would only refer you to the Accident Centre anyway".

One headmaster explained that he preferred to take or refer children to the accident centre:

> "because in most cases when I decide that hospital treatment is necessary, the doctor would come to the same diagnosis, therefore

> there is delay in getting the child there. Very few doctors are readily available in their surgery and if stitching has got to be done, then it's usually the hospital that does it".

In both these explanations there was an element of convenience. Two other teachers referred to the convenience. One said:

> "If it's a straightforward case I bandage them up, pat them on the head and send them out into the playground again. If I consider the wound is deep enough to warrant stitching, which you come across from time to time, then if I can contact the child's parents, I do. If the child's parents have transport readily available then I leave them. I advise them to take the child to the Accident Centre, and if I cannot contact the parent I take the child to the Accident Centre anyway... I cannot send children to their doctors. This being a village, the nearest doctor is a long, long way away. If I can contact a parent then, as in this case, I will either advise contacting a doctor or the Accident Centre, according to how serious I consider the injury to be. In this case the choice for the headmaster is between going to the accident centre or contacting a parent and leaving it up to him, although the suggestion is that hospital is more appropriate for the more severe cases".

A first-aider suggested the reason for the infrequent use of the G.P. is because:

> "It's much easier for us to contact the hospital because we have children coming from a wide catchment area".

Most of the teachers suggested that their choice was between the accident centre or parents. However, a number of them explained the reason for not contacting a G.P. in terms of 'ethics'.

A deputy headmaster explained that he would never contact a G.P. because:

> "I don't think it would be ethical to do it. We would send them to mother or father to take to the G.P. We would say that we think that, but that is all. It seems to me we couldn't bypass the parent".

He said that accidents needing treatment or even investigation would most certainly go to the hospital in any case. The school didn't have a doctor on call but used the clinic nearby if there was an emergency. This teacher implied that whenever accidents occur on the premises and they are judged to need medical attention, the staff decide to take the child to the hospital, contacting the parents at the same time. The hospital seems to be the place where injuries are taken and the decision is made by the staff, but keeping the parents informed. In the case of illness it appears that the parents are contacted and left to make the decision themselves about going to the doctor although sometimes a suggestion is made by the staff. On no occasion does the

staff contact a child's G.P. and this is the case because of 'ethical' reasons. It appears the staff feel that their responsibility is to get the children to medical attention as quickly as possible when necessary but the decision to treat depends on parents and 'professionals'.

This question of 'ethics' or confidentiality was mentioned by others.

M.C. "Do you ever call a G.P. in here?

H.M. "Oh no, no, we refer to the parent. We adopted our normal procedure. I never contact the G.P. directly, it's not my business... as a matter of confidentiality."

M.C. "What do you mean confidentiality?

H.M. "Well, for instance, if a child is ill or if a child goes to a doctor, doctors do not talk about their patients normally to outsiders. Normally they talk about their patients if they are children to the parents, so we don't go through the parents to the doctor. In other words I will write a letter suggesting that, to the mother, you know something like - Dear Mrs Brown, I notice Johnny has, or my attention has been drawn to the fact that Johnny has, a lot of rather nasty rashes, sores on his face. It's possible that this may be infectious but would you please go and see your doctor and ask him to diagnose if it's true. In other words we do not attempt everto make a diagnosis. It is not our job, we are teachers".

Whilst schools do have to deal mainly with injuries, some teachers did mention that they have a distinctive policy for injuries and illness as the headmaster referred to in the above. However, whilst this may be the case for the majority of complaints in certain circumstances such as when a child is incapacitated by symptoms and in the staff's opinion requiring medical treatment an ambulance is called which will usually go straight to the hospital. The use of the ambulance overcomes the predicament of whom to contact. It was the headmaster in the above who called the ambulance after a child had had a fit on the premises. Other teachers who have a different procedure for illness as opposed to injury sometimes use the hospital in 'an emergency'. For example:

"If somebody is ill - just now we have an outbreak of German measles, they come down - I have a quick look at them and you usually tell pretty quickly, you know they sort of get you to see the rash. I usually 'phoned up the parents and asked them to collect them and they sort of carry on from there. If a boy is sick, then it really depends how bad he is. If he is just - well, you think it might just be games straight after lunch and that's made them sick. I say well lie down for a while in the M.I. room. Really it's a sort of situation as it comes up". But with accidents,
"Yes (we prefer to take them to hospital rather than their own doctor)... usually when we haee accidents, it's something pretty obvious and the children from here invariably have to go home on the bus,

> and if a child's had an accident I don't think they are usually: fit to go on a bus and that's really the main reason, we are out of town, it is difficult for them to get home quickly as they have to bus into town and then out to wherever they go, we cover a large area".

But this teacher later listed a number of 'episodes' that she had dealt with which seem to contradict her theory.

> "There was another boy who had abdominal pains in his stomach. We didn't know what that was you know, it could have been almost anything, so he was sent in (to hospital) as well. Actually it turned out that he had been fishing and that was what it was all about. He was just over a bout of flu but you can't tell, it could be appendicitis, it's very difficult to tell".

In only one case was a G.P. asked to treat a child at school. This teacher said he sometimes used a G.P. but this was in special circumstances. He said:

> "Yes (I have used the G.P.) on occasions. It's a delicate matter because it's a confidential situation and I would ask the doctor if I really wanted to know something and they are willing to give me information in the interest of the child".

The G.P. is then used as an information giver rather than treater, but then he said:

> "A girl in the first year had an epileptic fit and we called the G.P. out then and he came to school. He was here within about eight minutes of the child having the fit so we can do it".

However, he then said:

> "We wouldn't normally send cases to a G.P. no, if it was an emergency it would be to the hospital, the accident unit".

G.P.'s telephone numbers are only kept for children who have special complaints, such as diabetes or epilepsy and usually they are used as informants.

So teachers seldom or never took children to G.P.s or brought G.P.s in for medical reasons (injuries should be treated at the accident centre), for convenience and also for ethical reasons. Some did distinguish between a G.P. for illness and an Accident Centre for injury, but such a policy was contradicted by the description of a number of cases where acute symptoms were manifested and the ambulance or Accident Centre were used. Such stories hint at the importance of circumstantial elements and they suggest that

injuries are believed to be appropriate for the accident centre not merely because the appropriate medical facilities are there but also because the school feels more legal and moral responsibility for injuries than for illness occurring on the premises (as normally latter wasn't caused by school). Moreover, injuries occur more often so their regular source of medical treatment, the Accident Centre is seen as the more appropriate for accidents.

There are two differencet aspects to the second question about the teacher's threshold of urgency. Firstly, it may be that, given the commitment to other school activities, the teacher has to make sure that the quickest course of action should be followed if medical attention is seen to be needed. Thus taking the child to hospital would be one of the most efficient alternatives given the circumstances of the teacher. Such explanations for the use of the accident centre were not offered immediately by the teachers, although they were discussed during the interview. Whilst some teachers did refer to problems that their role as first-aider brought in terms of disruptions, in other (mainly teaching) activities many schools had procedures for minimising the disturbance. This headmaster who acted as a first-aid worker described his position:

> "It is not really disruptive because most of these things crop up during play time and some of them have a habit of happening in the last few minutes of playtime and because I am a full-time teaching head, they're (the children) accustomed to me having to be called away to the 'phone or someone like yourself coming along during the afternoon, and so I've only got to tell them what to get on with they get on with it while I'm seeing to patients. If I have to go to the hospital, of course, this presents another problem because it means that I have to leave the class but in most cases I can ask another teacher if I have one in this building on duty at the time, or I have secretarial assistance on four mornings a week and my secretary keeps an eye on the class. This is the only drawback, if it happens to happen at a time when there is only myself in this building, and an infant teacher over there, then I have to sort of leave the whole school in her charge".

Other schools have a first-aider who is one of the teachers and on such occasions when no one is available they call an ambulance. In secondary schools the sufferer seems to be taken up to the accident centre and left with another pupil until treatment is over when the school or the parents come and collect the child. In primary schools the staff normally stay with the pupil until the parents arrive.

The general impression given by staff was that although disruptions were caused by accidents the welfare of the child was the immediate priority.

> "Oh, it's a problem when accidents tend to happen at the most inconvenient time. But one drops whatever one is doing at that particular time and takes the child to hospital. I mean no child ever leaves the school, if I have cause to send a child home even during the day, no child leaves the school unless he is accompanied either by myself or by my secretary. I don't ask my staff to do it. My teaching curriculum is much less than those of my staff and consequently I feel that I can really put aside whatever work that I am doing and for instance the diabetic coma happened during a time when I was interviewing for a senior member of staff, so you can see how inconvenient it can be at some time or other but nevertheless we stopped the interview, I went to the hospital with the child".

He goes on:

> "If I can't get hold of the parent immediately I will stay with the child until the parent arrives at the hospital. I feel to take a child home and to get her to hospital might disrupt my work for three-quarters of an hour but this is three-quarters of an hour which I can easily make up".

Certainly, whilst teachers emphasised that they would do anything for the well-being of the child there was a suggestion, if only indirect, that problems are caused by injuries and that procedures are quite naturally worked out in some schools to minimise this inconvenience.

The second aspect to this question refers to moral and legal aspects of child care. Some teachers made it clear that when the injury occurs on the school premises they are in a different position than if it had occurred outside the school. One headmaster made a distinction between ailments that happen within the school and those that occur outside. If, as in the particular case in question, it was believed that the child had initially injured herself outside school then the headmaster would inform the parents that the child still has an injury which was troubling her and would suggest that they either contacted their general practitioner or took the child to the accident centre. However, if the incident occurred at school the headmaster would have taken the child to hospital, contacting the parents on the way. The reason for this difference seems to lie with the headmaster's interpretation of his position in 'loco parentis'. He said he would never go to a G.P. for injuries occurring at the school as:

> "I think when one goes to the Accident Centre, the fact that the accident has been recorded at the Accident Centre is also noted on a letter which I understand eventually goes to the G.P. Therefore the G.P. is contacted. I am in 'loco parentis' for all intents and purposes, therefore there would seem to be very little point in contacting the doctor at that particular stage."

This headmaster suggested that this legal position does influence his behaviour, not in the sense of becoming over cautious but inhibiting contacting professional medical sources. He said:

> "I deal with other people's children in the same way as I would deal with mine and in the same way as I would expect my children to be dealt with at school. This is probably the extent of the care that we take".

He said that no legal position restricts him.

> "What I would like is... there have been a number of occasions when there has been a delay in being able to contact a parent. The longest delay was something like three and a half hours before we could get hold of either parent. In a case like that I wish that sometimes I had the authority to sign the paper to say, for God's sake go ahead and give an answer, get the child out of his misery".

This headmaster's views were different from others that were interviewed. Some certainly suggested that they prefer to err on the side of caution. One said:

> "I understand the school is responsible for the children whilst they, within school time, are on the school premises and that's just about it. We try to make sure. They are other people's children and we can't risk anything".

Another teacher said that if the injury had occurred to her she wouldn't have gone to the accident centre.

> "As far as I am concerned I am an adult and I am responsible for myself and the child is not responsible for itself and I think we are here in loco parentis".

One headmaster was more explicit and cited an example which illustrated his position.

> "Oh yes, you have to be extremely careful. What you do, there are forms and observances to go through, and you are walking... not so much walking a tight-rope but one mustn't tell parents, you know, what their job is, and one mustn't tell doctors what their job is, what one must do if one suspects a child is not well, not thriving, there is something wrong, is to draw the attention of the parent to it, in the hope that they will go and talk to their G.P. The G.P. is always at liberty if he wishes to ring up or ask the school what is the matter".

He then went on to talk about the implication of this when dealing with the children.

> "Well you must do (err on the side of caution) because, I mean there was a case the other day that, my wife teaches infants, and I mean I have felt this before, where a child fell over or at least bumped into somebody and fell over in the playground and the teacher on playground duty noticed the child crying and said to the teacher that he had banged his arm. Teacher said it is all right, you can move your fingers. And actually when the child got home at 4.o'clock, he still complained so at five o.clock mother took him to the doctor, he had fractured his arm in two places. You see here was a case where the teacher sort of did the obvious thing but really I suppose the school should have had a medical room and somebody should have checked thoroughly, but it is very difficult to do if you've got 200 children, you can't follow each one through... but certainly we have to exercise caution because we do have children here who naturally have a greater average incidence of physical clumsiness and perhaps are less verbal in telling people what is wrong with them, check over fairly thoroughly".

This, if only limited evidence, suggests that for some teachers their notion of urgency is coloured by socio-legal conditions when dealing with children and other people's children. One headmaster said:

> "Yes, you see that we are in loco parentis and I suppose there is too much legality about things today. I mean, and the other thing is the new legalities governing accidents at work. Head teachers are doubly open in that it is not so much that the child has an accident and is treated, but whether the cause of the accident was something due to chance or due to negligence as if it were like a lead trailing over a floor or an electric plug".

2. Episodes at work: the position of the employer

In all, 81 cases involved either an episode at work or referral to the medical services by a representative of the sufferer's employer. The Table 7.2 shows that all of the cases apart from one, occurred in employment circumstances. It is noticeable that compared with the complementary table for educational institutions, there is a third category for those cases not occurring at work. There were 12 cases where the episode occurred at work but the decision to seek medical care was either delayed for a day or more or made at a different site.

Before further discussion of these results, some of the categories used in the table should be clarified. Contact with a work representative includes all those people who in some way or another represent the interest of the employer. These can range from employers themselves or to medical personnel employed by companies even doctors themselves.

Contact only with workmates, many of whom gave advice, is not counted as contacts with work representatives.

The circumstances of employment did not only involve industrial contexts with the sufferer being in the position of employee. Some were employed in service industry or catering industry and farming, some were on vocational training programmes or in the army. One was self-employed and others, although employees, were working on sites by themselves or with colleagues. So, unlike in educational institutions, these episodes occurred in a wide range of different contexts.

Once again, the use of G.P. services was rare, in only 17 out of the 81 cases, and in only five of those cases was the decision made at work. In one case a soldier who was staying at the local barracks temporarily was suffering from an infection and he was referred to the local G.P. by his sergeant. In two other cases, the workmates under instructions from their employers took the sufferer to their local health centre, in one case specifically for treatment from the doctor and in the other for treatment by the nurse in the treatment room. This is what the sufferer said:

> "Someone bandaged it up for me and persuaded me to go down to the clinic with it. I could have put it off, I wasn't going to go at all, well, I was persuaded to go and in the end I went... I had to report to the chargehand to ask to go down to the clinic...." He then explained about going to the health centre: "I only went to the treatment room to get it dressed. To me it was just a cut, it wasn't worth going to the doctor. As it happened the cut did not stop bleeding and in the evening I went to the accident centre".

This case also gives an illustration of patients using G.P. facilities for treatment but for one reason or other after treatment is not successful, using the accident centre for a second source.

In one case a student nurse became ill herself whilst working at a local hospital. The ward sister rang the students nurses' G.P. who told her to go to casualty. In the last of these five cases the Personnel Officer rang the G.P. from the work. More details are available on this particular case.

This twenty-eight year old man was repairing large containers. He said:

> "I had a piece of metal in my finger and as it didn't cause any trouble I left it. This was when I was at sea about 5 years ago.

> I was repairing large bulk bins and I struck my finger with a hammer".

He was with a workmate at the time and although he spoke to him about it he has carried on working as usual. He said:

> "I was aware I'd always had something in my finger because I could see it there. This time I thought I'd chipped a bone or something...I thought I'd leave it to them at work. I certainly didn't expect to be off work but my employer took me to A.E.D. and they made me take a week off".

He didn't think it was very serious. He said:

> "I didn't give it much thought. I still just thought I'd probably chipped a bone... It wasn't painful... no it was just the fact that I couldn't move it. It was numb".

He didn't worry at the time.

> "I didn't at the time but it has since".

He said that it wasn't until several days after when he couldn't carry on with his usual activities that he did something about it.

> "It was so tight by Monday that I had to go to the 'first-aid' at work".

It is perhaps important to note that this man gets paid according to the hours that he works. He said:

> "I need the money. I don't get paid when I'm not there".

He said he could have put off going to first-aid to the following day.

> "But it would have got worse".

The Personnel Officer who dealt with this case said:

> "He came into us and he had hurt his finger. And what I said to him was I had a look at it and it was stiff and I said, show me how you did it, and that time he wasn't precisely sure how he had done it. Since he is knocking in nails I suggested to him that he might have hit it with a hammer and he said, yes I could have done. So I said, well quite honestly, looking at a thing like that can you manage to work? I said that if you find that it's not getting any better, you ought to go and see your G.P. Because of that stage I wasn't sure that there had been any accident".

At this point, the stories from the patient and the personnel officer conflict. The patient said that the personnel officer rang the man's G.P.

at about 9.00.a.m. and the G.P. told the personnel officer that the man should go directly to hospital, which according to the man (patient) he did. However, the personnel officer had this to say:

> "There was no doubt about it, that finger of his, I said to him that it wanted looking at medically. It was outside my scope or indeed anybody else's we've got here, to assess what was the matter with that finger and it wanted looking at".

But the personnel officer didn't think it was serious.

> "Well, no, not serious, that's why we rang the doctor and suggested that he.... it's a fact that he didn't know precisely how he had done it and he obviously had got a lump on the knuckle and it was stiff, and very painful and that's why we rang the doctor to get the doctor to have a look at it, before we went him off... because we didn't consider that that was the sort of thing that we would bother Canterbury with".

He went on:

> "We gave him leave to go and see his doctor. We made arrangements for him to get an appointment to see his doctor. We rang the doctor and asked to get an appointment to see his doctor. We rang the doctor and asked to get an appointment because we thought it was an accident at work, didn't know what it was but could he go down and see him. So he saw his doctor and the doctor rang back and said that apparently it was an aggravation of a previous injury and that there was no break but there was a foreign body there and that the doctor thought he should have an x-ray so he was taken down by one of our staff for an x-ray.

Whatever happened, it appears that a G.P. was contacted and that his advice was eventually accepted about taking the man to hospital.

Because of the large number of cases, it is not feasible to explain the patterns of action of each case. However, there was a number of different groups of cases of special interest.

Apart from two cases described above where the person contacted a local G.P. before going to the accident centre, even though they didn't live in the locality, there were a number of other sufferers who were not permanent residents but were working in the area on a temporary basis. In all, there were eleven such cases, including the two previously described which fell into this group. There was one other soldier, apart from the one previously described, another was on a police training course, and another was a sailor whose ship had docked in one of the local ports. Other cases involved people whose work brought them to the area. Two were involved in quarrying and two were involvedin the entertainment industry. One of the .

latter was with a travelling circus and the other was appearing in the local theatre and travelling around with a company. In the case of the theatre there is a local doctor on call but he wasn't used. One sufferer was a gypsy working in the area.

In nearly half of the 81 cases, the sufferer went directly from the site of the episode to the accident centre, the majority of these having contact with an employer's representative varied from case to case. In some cases, the decision made made by the employer's representative. For example, three injuries occurred in a local colliery which had a medical centre staffed by a nursing sister and a medical room attendant, and with a doctor on call. Two of these three cases followed a similar pattern and the details of one of them was as follows:

> This is how a miner explained how he injured his left hand
>
> "I was working seven miles along the mine, was putting a pack on. This is in order to hold the roof, as the pit advances the roof is packed behind you to hold it. The stone is used from the advancing tip to pack the sides. I was lifting one of the stones and my finger was caught". He cut the little finger of the left hand and he also crushed it. He explained what happened then. "I carried on working for an hour. I didn't know it was broke. You don't come out of a mine with just a superficial injury. It is not the done thing. It creates a lot of inconvenience to a lot of people. It also involves production to a great extent, owing to the fact that the collier is 7 miles in. This means that to convey a man 7 miles out involves a lot of lapse in a lot of people's work... Then it became so painful... after an hour had passed I realised it was bad because it didn't stop bleeding"... The first-aider discussed it but the overmanager didn't think it was bad enough to go immediately to hospital and we didn't think it was bad enough to stop the shift".

However, at some point an old miner told him that it was broken and this diagnosis was supported by the attendant at the medical centre. After the shift was over, the miner went to the medical centre where he was seen by a medical attendant. In this case the medical attendant referred the miner to hospital and he was taken in the mine's own ambulance. The miner said:

> "You have to do what the 'medic' advises because of claims".

In other cases, the decision was made by the sufferer himself and the employer agreed. For example, a 21 year old man who cut his right leg whilst working at an electrical firm explained how it happened.

> "We had some plastic trunking and I was trimming the ends with a knife because plastic makes a bit of a mess. It's got a mind

> of its own and I was cutting away from me and the plastic pushed the knife down instead of it going up the way I wanted it to go. I was sitting on a high stool and of course it went and cut my leg".
>
> "My workmate got the first-aid box and we put a plaster on it.... It didn't look too serious but it started bleeding a lot and I thought that I had better have it seen".

It didn't restrict him but his leg was slightly stiff. He discussed it with his workmate and said:

> "I wasn't sure. We discussed it between us and we wondered if it was worth going to the hospital or not but someone said even if it's only for the tetanus injections, it's worth going. So he went directly to the hospital with his wokmate in the latter's own car".

He didn't contact his G.P. because:

> "Well, it was not worth wasting his time and I didn't think it was the right place to to".

The manager of the firm said this about the injury:

> "I wouldn't have thought it was that serious. Just a lot of blood. The wound was cleared, cleared of any dirt so to see how bad it was, and you know, assess it to see something needed doing to it. Yes, and put a temporary bandage on it. It was suggested that he went to the hospital and he agreed to go... I think they decided it needed stitches".

A similar injury occurred at another factory but in this case the chargehand played a more significant part. The sufferer explained how it happened.

> "Well as the material was coming through the oven where it is counted, I was cutting it off in its lengths and as I cut it, it cut awkward and I just cut my thumb." The foreman on duty took him to the first-aid man. They felt it was a serious accident and was instantly dealt with. The safety officer described the symptoms. "He (the sufferer) didn't have any signs of shock. I think the more shock happened to one of the first-aid men treating him when he saw the blood but, as it happened, or other than the normal shock one would expect with loss of blodd, he didn't faint and he didn't pass out, there were more of the shock symptoms, although undoubtedly he was shocked to a certain degree". The foreman on duty rang for the ambulance and the first-aid man cleaned him up. The sufferer said that he thought his injury was 'pretty serious' and he said, "I didn't realise that I had cut myself until I saw all the blood coming out and I got hold of my other hand to hold the gap together".

He said he couldn't put off going to hospital because it just would not stop bleeding but the decision to contact the medical services was made by the charge hand on duty.

Of the 50 cases where an episode occurred at work and the sufferers had contact with an employer's representative, 62% were told to go to the accident centre of were taken to the accident centre. In only 18% of the cases did the aufferer after contact with an employer to to another site.

Table II shows that in twelve cases when the episode occurred at work there was at least a day's delay before medical help was sought, even though the decision to seek help was eventually made at work. Examples of this pattern are shown in the following case.

There seems to have been some disagreement between the woman in this case who injured her finger and the woman who was responsible for first-aid. The injured woman said:

> "I was just working and as you pick the ends up because they are wooden boxes, your machine's in front of you and I banged my hand on the framer. It's the maching for framing the boxes ... I carried on working but I had to keep my finger out of the way ... By the next week it was too painful to work so I went to the first-aider and she took me to the hospital."

She said that at work they said initially that nothing was wrong with it.

> "They (at work) kept telling me there was nothing wrong with it. They said they couldn't put anything on it because there was not any cuts. The first-aider kept saying, 'it's only a whitlow'.

The woman said she couldn't put off contacting the doctor or the hopsital, or in her case telling the first-aider because,

> "My hand was all swollen up, all down my hand... it was so sore."

The first-aider who dealt with it agreed with the woman's account it happened and said this about her evaluation of the severity.

> "It looked rather painful on the day she actually told us. She came in and I think she said, 'My hand, it's painful', and then she said, 'Would you have a look at it', and it was rather swollen."

The first-aider told the woman that if she had knocked the finger at work then she should really have reported it on the day that she did it. After initial examination, she said,

> "We all thought it was a whitlow. First of all because she had a swelling round the quick part and it looked very red there, and

> we said it could be a whitlow or certainly there was inflammation there because it was red ... I mean to open something up, which is what we never touch ... The only thing I did say to her was about bathing it, If it was a whitlow and she said, 'I have put a hot poultice on and it's done nothing and I said, 'Well, then, I think you'd better go to the hospital'."

The first-aider was uncertain as to whether it was a whitlow or not. She said,

> " It was the swelling really, you see, and after she said she'd knocked it, there was a possibility that she could have chipped something inside you see. This is more or less the reason why she was sent to hopsital because of the swelling and saying it was knocked."

As regards the decision to use the hospital instead of a G.P. the injured woman said this.

> "I dont get home until 6.00 p.m. by the time I've collected my kiddies the surgery is closed."

And she said, and this possibily with insight about the nature of the treatment given,

> "I wouldn't have fancied sitting in the doctor's surgery and letting him take my nail off."

The first-aider gave a different account as to why a G.P. wasn't contacted.

> "Well circumstances prevented that. We did ask this but her doctor lives in A. She's got no transport at all to get to her doctor and she lives in B. I did say this, I felt that your own doctor, if it has been a whitlow would advice you about this and she looked at me and she said, 'Oh I've got a problem because I've got a doctor in A and I've got no transport to get to A ....' She's in rather a difficult position where her children are being minded about a mile and a half from the village where she has to walk to get the children. But we didn't send her for that reason. Circumstances do change it rather than if she had a local doctor, she could have gone in the evening, because we, generally, you know, you have to make an appointment with these doctors in the village, where we would have made the appointment from here for her if she had a local doctor."

This answer is interesting, not only because it appears that this woman's circumstances may have played a part in her going to the hospital but the answer tends to indicate that the first-aider has a notion about what the hospital feels ought to be their function. Thus the social problems or personal problems that the woman had were not seen by the first-aider as a legitimate reason to account for her use of the

hospital. The medical reasons given before this explanation seemed, according to the first-aider, a more legitimate reason to give. In fact, there are two different ways of interpreting these answers. Firstly, it can be argued that the respondent's account of the circumstances that led to the use of the hospital should be taken on face value and accepted as a plausible account of what went on and why it went on. However, secondly, it could be argued that this account represents a strategy used by the respondent to show that they are doing the 'right' thing or doing the thing that they think is publicly or morally acceptable. It appears that this respondent is using the interview to interpret what happened in the context of the present encounter with a representative of any official agency.

Table II also shows that some injuries or illnesses went unnoticed by employers even though they occurred at work. For example, an elderly woman injured her arm at her work. She said after it happened:

> "I didn't think anything was wrong. I went and got on with my work. I have to use my hands as I make optical frames. It was only when I went to coffee that I noticed how swollen it was and I got a bit frightened ... I carried on to 12 o'clock but it was rather silly to do that. It was so painful and swollen... The girl at work saw me fall and I told her not to tell anyone, because I didn't want to make a fuss. She said I was silly not to report it as it happened at work."

She went home from work at her normal time and her daughter who lives next door came in and made an appointment to see the doctor.

The employer said this about the incident:

> "We didn't do anything because we were unaware that an accident had actually happened. She did not tell the management on the Tuesday when it happened and the first we knew about it was when she wasn't at work the following day and then having made a few enquiries, I learned from her colleague that she had a fall."

Data presented in the above certainly indicates that when an episode occurs at work, and a representative of the employer becomes involved, then the accident centre is used if medical help is required. The G.P. or health centre is used only minimally. However, the interviews suggest that not only do employers' representatives have an inclination to use the accident centre, but also a sufferer's colleagues would also suggest a similar course if asked. These data also suggest that in almost half the cases action was not taken to seek medical help immediately after the 'episode' took place. The use of G.P. services was more likely to

occur when the decision was at another site and there was no contact with an employer's representative.

Policies of Employers for dealing with injury and illness

In this next section, given the results from the above, two questions are proposed

1. Why do employers prefer to use the accident centre rather than a G.P.?

2. Are employer's thresholds of urgency coloured by conditions other than the perceived medical severity of the complaint?

With regard to the first question, it became evident as with educational institutions that staff mainly had to deal with injuries rather than illnesses; hence many managers or employers, when talking about dealing with medical complaints, referred to their procedures for dealing with injury. One manager of an Electrical Firm with staff of fifteen said this about use of G.Ps.:

> "We never use a G.P., in these cases (cut hand) because we have somebody who is involved in this type of service anyway and I think that if we felt the injury was serious enough, we would call in the hospital direct anyway. The possibilities of getting a G.P. to come quickly as we could get somebody to the hospital are non-existent really." He went on to explain further the reasons for preferring the hospital. "Convenience and it seems as though that's the quickest answer to the problems at that time anyway. We feel that they're going to get attention for their injury far quicker than if we called in a doctor."

Similarly, a medical room attendant on duty at a medical centre at one of the local collieries said,

> "We never contact a G.P. If a man requires medical attention we treat immediately then we send him to hospital. But in cases where medical attention is not required immediately such as 'strains, sprains and minor wounds of one sort or another', patients are referred to their G.P. but do not go directly from the pit."

One manager of a bus company suggested that for all episodes the practice generally was to refer to hospital.

> "In the main it's straight to the hospital. I think in the main it's straight to the hospital because if someone demands immediate treatment, if there is some slight mishap which doesn't warrant going to hospital, a chap might be advised to go to the doctors or be sent to the company doctor."

For lacerations or suspected fractures the hospital is always used.

> "I don't think in the normal course of events the G.P. would have this sort of case sent to him. We don't normally call him for accidents, it's always to Casualty, up to the hospital. It's pretty well always to the Casualty Department."

The above evidence suggests clearly that for injuries the accident centre is nearly always the source of professional medical care. Is there any evidence to suggest that a similar pattern occurs for other types of complaint? A safety officer said this about his firm's policy about coping with illness:

> "We might advise him (the sufferer) to go to the doctor if a man said he felt sick, we would send him home and let him consult his doctor and let him make that decision, other than the obvious heart attack, when we would, or if a man fainted, or if a man collapsed, but if a man merely said that I feel sick then we would probably have escorted him home or sent him home and advised him to see his doctor. I don't think we would cart him down to the doctor for sickness."

There is a suggestion here that when the individual is incapacitated by acute illness and can't make a decision, then they would use the hospital. Such a policy is also adopted by a large garage who employ 200 staff. The safety officer said,

> "We don't contact G.Ps. because we find that if the first-aider has decided that it's treatment, casualty, hospital, it's a necessity, in that particular case then there is a delay period of contacting the G.P., he can't come, he won't come, he's out on calls, he is taking his surgery, there is all sort of delay, delay.

M.C. "Say somebody cut his finger, would you take him to a G.P.?

Safety Officer "I doubt it very much. If you ran him round to a G.P. and that G.P. was not his doctor, then the G.P. would say probably,

(a) that's a job for the hospital, it needs stitches in there.

(b) I am not his general practitioner, I am not his doctor, he is not on my list, I would suggest you take him to his own doctor which could be seven and a half miles away, he may not live locally or take him to the hospital, so you have wasted that time, and you have come to that conclusion anyway initially. If the first-aider can't treat that person, then that person must be injured to a degree where a specialist is needed, and the only way you're going to find a specialist able to treat that person is at an establishment such as a casualty centre or hospital."

M.C. "What happens with cases where a person collapses, faints or has a fit?

Safety Officer "We don't necessarily take them to hospital. Shall we say a person who is employed in a particular department is a known epileptic. He has fits and has had fits on the premises or elsewhere, but he is known, then the first-aider in that particular department would know how to deal with epileptics generally if they had a fit ... however if the normal recovery time for that particular epileptic fit did not seem to be happening then they would probably contact his doctor if they could or if that was not available, then they would have no alternative but to take the person or arrange for an ambulance to take that person to hospital."

Some firms do seem to have regular contact with G.P.s and the choice between going to the doctor and the Accident Centre is a real one. A first-aider at a fruit-packing station said this:

> "I talked to a young lady, I think it was Wednesday or Thursday and she was coughing up blood and I was disturbed about this, so we sent her home, took her right home and I got in touch with the doctor, well to supervise her to get her in that very evening because I mean sometimes you can ring up, or they ring up the doctor and it could be two days away before the local doctors will even see them ... So I felt it was one time when they could get a move on."

According to these first-aid workers they also have difficulties contacting G.P.s direct because of differences in status. They talked about their British Red Cross Training.

> ".... but nearly everything is if you are not happy consult your local doctor but you see very often for the likes of a first-aid worker, I mean to pick up that phone myself, a doctor woundn't even speak to you, you've got to go through the supervisor, everything is done through the supervisors and Idon't think unless you ... I mean all you can do is to advise a patient to go to the doctor."

She went on to say that hospitals are used for accidents.

A personnel manager at another packing station also said that G.Ps. are used:

> "We only send them to their G.P. if it's not an accident ... if it's not an accident in the sense of the word, I mean .... if we particularly wanted a doctor we would get a doctor up here let's face it. We usually get the doctor if it is something medical rather than accident. If it's an accident, what we do is to treat it as an accident and invariably take them to one or other of the Accident Centres."

He talked about the use of the cottage hospital at Faversham and Accident Centre at Canterbury.

> "We would ring them up (Faversham) and ask them if they could cope with it. Sometimes they say could you take them to Canterbury, sometimes they will cope. If it's a bit bigger for instance we had a girl who broke her arm a couple of years ago and what we did there was, of course with a known broken arm, was to send for an ambulance, get her straight up to the Accident Centre, as quick as we possibly could. But if it's something medical, somebody is not complaining of feeling well and they've got spots or something of that sort, we then say well if you are not feeling well do you think you ought to go home, perhaps you ought to see your doctor and suggest that they see their doctor, and if they say well can you make an appointment, of course we will make an appointment and if they were not in 'walking' condition, if somebody had got raving flue, we would take them up ourselves to make the appointment... There are times when we say I'm sorry they'll have to go themselves but if the circumstances is such that the person, for instance we had a lady the other morning who came into work and she obviously had got a very bad dose of flu, so we wrapped her up in a blanket and got somebody to take her home....."

These data suggest that for most firms, when confronted with an injury which they feel requires medical attention, the accident centre is the usual source of medical care. Some firms seem to make a distinction between injury and illness and for the latter type of complaint a G.P. is seen to be the appropriate source of care. However, there were hints that in some circumstances ambulances are used.

The chief reasons for using accident centres for injuries seem to hinge on two different dimensions. Firstly, more firms with qualified medical personnel feel that if their first-aid man can't handle the complaint, then only a specialist can and so hospital treatment is warranted. Secondly, it is much more convenient going to the accident centre in that it is quicker and therefore more efficient. One first-aider referred to the 'social' barriers involved in contacting a G.P. themselves.

With regard to the second question on the influences of 'non-medical' factors on the staff's perception of urgency, the CSA would argue that the employer's perception of urgency is coloured by the need to maintain the firm's activities and thus get the employees back to work as quickly as possible. The data show that, of the sufferers who were injured at work and went to the accident centre from the site of work, 19 out of 35 went back to work. Excluded from this analysis are those whose work was also their home (sailors etc.) and those who were admitted to hospital. The problem with these figures is that although in some cases the sufferer

does go back to work, he does not perform his normal task and is sometimes given a less demanding job for the rest of the day. Of these 19 cases, 15 were advised to go to the hospital by the employer or employer's representative or were taken to the hospital by one of them. Of the 16 cases who didn't come back to work, after their visit to the accident centre 13 were instructed to go to the Accident Centre by an employer's representative. There is little difference between these ratios which suggests other influences are just as important.

Interviews with employers suggest that employers take into account the economic aspects of the firm's activity when referring a man to the medical services. One managing director of a local firm who was interviewed over the telephone (he didn't have time to see us) said that one of his employees is an ex-medical orderly who is 'always' available to deal with medical matters. He said that because this man was only a paramedical he couldn't take the responsibility for 'stitching' a cut and he would leave it to the professionals at the accident centre and went on to suggest that his major concern was with getting his employees back to work as quickly as possible. He said the employees wished to get back to work as soon as possible as well.

In contrast, one first-aider at a fruit packing station said that her firm was very 'good' in that the priority was given to the welfare of the patient. She said

> "The company don't mind a bit. That is something that you are expected to do ... Oh no, time doesn't come into it and you see often we've left girls up there (at the accident centre) when we go home, the Managing Director will stop here at anytime to go and pick them girls up and take them back."

This quote illustrates the humanitarian side to some company's policy, but a more balanced view was given by the safety officer for a motor garage who suggested that whilst the firm needed to make money so did the employees. He said:

> "Every company is interested in making money, and in commerce if you don't make a profit then you are no longer a viable company."

He then went on to give an example where money can play a part.

> "If a first-aider was appointed and that person appointed was for instance a technician who was earning money at a particular job function, then that job function also had the attraction of having monetary incentive, the more turned out the more he had paid. In those circumstances the person them was drawn away from

> that particular occupation for about half an hour, three-quarters of an hour, each time he was drawn away he couldn't be earning money so therefore the incentive bonus if you like, the payment for turning out that extra work would fall off so he would lose money. In that instance I can understand the person concerned that is the first-aider concerned being a little bit disillusioned in respect that all right he is doing a good job, he is looking after people, that's a humanitarian need fulfilled, but where does his pocket come in, what about the money that is lost. Now from that point of view, his profitability if you like, the money, his earning power, the money he would have earned had he still been working instead of doing first-aid, yes I CAN SEE THAT that could be ... it hasn't arisen here. It hasn't arisen because our injury rate is so low that I doubt very much whether our first-aider as such is called on once in three months, to give first-aid treatment."

This security officer did admit that there was a problem mixing the welfare of the employees with the economic needs of running a company.

> "When appointing first-aiders, we have to think about the availability of the first-aider because a first-aider, to be effective has to be available. This is why we try to cover more than one first-aider ... We also have to consider what sort of work was that person employed on, what type of work, was he or she available, would he be if that person is a technician working in the workshop, be in a position at any time during the day to give first-aid to another person."

The evidence suggests that economic aspects may play a part in influencing definitions of urgency but also large firms have developed strategies for minimising the impact on the firm's economic activities.

With regard to socio-legal aspects, where the firm may tend to err on the side of caution, there is some evidence to support this propositon. Some just said:

> "I'm concerned with the person and at Casualty you can get immediate treatment."

However, an interview with a Personnel Officer did bring out some of their worries.

The P.O. did not explicitly mention any legal pressure he was under but did refer to the need to err on the side of caution on a number of occasions. Firstly, in relation to the problem of having to go all the way to Canterbury for an x-ray.

> "As a first-aider and when I am fairly sure there is no break, but I can't guarantee that I'm fairly certain that there is no fracture but then there is no x-ray in Faversham. Nine times out of ten, which they are in fact no fracture",

and secondly, in relation to his worries about the proper use of the Accident Centre in Canterbury.

> "When we send them down, one wonders, whether they think that we've given them work which they needn't necessarily have had. I think we try to get away from that, but we are in a position where of course, where you talk about the legal thing, I mean the sort of thing we are very concerned with is if somebody gets something in their eye.. We get a splinter now and again but if somebody does get something in their eye, it's something we treat with utmost care, not that we don't with any others but what one tries not to do is to have to send down to Casualty somebody that is apparently trying to take you up for a trot. I think in general terms you can tell whether somebody has got a break or a fracture, but nevertheless if the pain is there how can one tell. I mean quite often we do it on the basis that firstly we would like an expert medical opinion and the other thing is that if the patient is quite sure that if they get expert medical advice it settles their mind."

Other explicitly suggested that injuries on the premises were treated differently from those off the premises. This is an account given by a first-aid person at a Fruit Packing Station.

> "When she said she'd knocked it at work, that's when you feel the responsibility is ours. You know, had she said, 'I just don't know what's happened to it', it would have been obvious that she might have done it at home, it's something that we can't prove, but she definitely said that she had knocked it on her frame... We had to accept it, but there is no witness to these things, it's like if somebody sort of trips over, and the next day they say I tripped over on such and such a thing and it is painful now. Who are we to disprove this is what they have done"

It is not clear if this influences their response in terms of seeking medical care, but one can guess that it becomes more urgent when it occurs on the premises. Although the staff were unclear as to their legal position, they thought it was the company who was responsible for injuries at work. As regards compensation for injury the first-aid person frequently indicated that claims were put in by staff. She said,

> "Oh it frequently happens, Mrs. A (in this case) did the same. I think it has become habit ... We know each one that has an accident, now they are getting quite good money for it, they are. I mean they are getting quite fantastic amounts. A few recently with the least little thing that happened. I think this is what came up with Mrs. A, wasn't straight away, with her foot not even in the door, which is rather annoying!"

Finally, the safety officer from the motor garage argued from a different point of view.

> "It not only involves a question of legality but also involves again the humanitarian side. If something goes wrong, do I carry the can for this particular person with the problem. For instance, say there was an injury serious enough to warrant some kind of informality and that person says after the problem has resolved itself, they can't perform activities that they used to be able to. Now they may say that was due to the fact of bad first-aid work, a person not coming

to the conclusion soon enough that they should be at hospital. Therefore one would expect that you would get a lot of terrified first-aiders who at a drop of a hat, say hospital, hospital every time."

However, he goes on to suggest that in his firm this wouldn't be the case.

"We say here is a first-aider working for our company, is he or she under this sort of pressure of perhaps claims for damages, etc., civil courts and this sort of thing looms up in front of him and this is the thing which stops them from putting their hands up. No I wouldn't have thought that because again they know that the company having employed that person has confidence in that person, they are not employed as first-aiders, this is only a secondary task. They are following their normal course of employment and I mean to take first-aid, because those type of persons have selected themselves if you like. They have selected themselves because they feel somthing for their brother worker if you like and they have this humanitarian thing that they would like to fulfil the possibilities of first-aid, some of course are St. John's or Red Cross people anyway. So they have this inner compunction if you like to do something with a firm hand and they broaden their horizons by going to courses etc., and leaning how to do it properly because an inexperienced person tackling an injury can sometimes do more harm than good, in certain circumstances, they feel they must do somthing, they want to do something and don't know how to go about it. They don't know the first thing what to do in the circumstances, what best to do for the person. Now I would have thought thatthe first-aider working for this particular company would know that the company would stand by them. We talk about insurance policies, and so forth, and while the company has its insurance cover would cover that person in the event that they had a claim against them so they would feel they've got the strength of the insurance company's around, but I should think that would be a secondary thought at the time of injury for the person, the first-aider would feel that firstly could they deal with the problem and do what is best for the person and only as a secondary consideration I would think and a long time behind that would be what the implications might be."

It seems therefore, if the last account is accurate, that the socio-legal aspects which influence perception of severity vary according to the size of the firm and approach to safety adopted by the firm. Certainly there is evidence that socio-legal aspects play an important part in the ways employers cope with industrial illness and accidents.

In concluding this section, these data suggest that employers generally prefer to use accident centres for coping with injuries and sometimes illness than contacting G.Ps. The reasons for this seem 'medical' as well as reasons of conveneince and efficiency. There is also a suggestion that because of economic reasons the quickest course of action has a high priority which means going to the accident centre. As regards socio-legal influences in evaluation of severity the evidence is inconclusive.

3. Contacts with the police and others after 'episodes' in the street and road

Table 7.3 shows the distribution of patients who had or did not have contact with bystanders and the police tabulated by the location of the episode, the site of the decision to seek medical care, and the choice of medical care system.

Before these data are analysed some of the categories need to be clarified. The category labelled 'contact with the police' included all those episodes where the police were at the scene of the episode or had some contact with the patient. Included in this category are those episodes where the patient had some contact with the police but no advice was given, or where advice was given but not heeded. The category 'contact with "bystander only" ' includes only those episodes where the police were not present or played no part in dealing with the episode.

Further data have been collected on ten of the episodes where the police were involved. Patients gave their written consent for the researcher to approach the police in each case and tape-recorded interviews were carried out with the police in police stations throughout the East Kent area.

In this analysis the focus will be mainly on those episodes that happened in the road or street because these are the areas where the police are most likely to be involved. In all 106 different 'episodes' are included in Table 7.3 but the majority of these episodes, 99 (93.4%) occurred in the street or road. However, before these are discussed in more depth, the seven cases are considered where the episode occurred at a different site from the street or road as they illustrate the variety of circumstances that leads to use of the accident and emergency services.

In one of these seven cases an attempt was made to contact a G.P. In this case an elderly woman fell down at home and broke her hip. She was incapacitated and being by herself called for help. A neighbour hearing cries tried to get into the house but the door was locked. The neighbour then rang the police who came and broke in. The police then rang for an ambulance and the ambulance men called out the lady's G.P.

In a similar case involving an elderly man who collapsed on the stairs in a home for elderly people, another resident found him and rang his daughter who lived nearby. The daughter came and rang the police. The police contacted the ambulance who took him to hospital.

In two of the seven cases the patients were on holiday and in one case the patient was travelling through the area. He was coming through customs at a port and dropped a bottle of wine cutting his hand on the glass. A policeman on duty at the port said he would take him to Dover hospital. The sufferer preferred to go to Canterbury hospital as he had friends he could stay with after leaving the hospital. The other case involved a patient staying at a boarding house in the area. The sufferer complained of stomach pains and his wife rang the police for a list of G.Ps. in the area. The police told them to go to the A.E.D. as they were close to it.

The final three cases involved a remarkable contrast in circumstances. One patient was assaulted on a beach, the police were contacted and he was taken to hospital. More will be said about these cases when the 'assault' category is considered as it has special implications for referral to hospital. Another case involved a member of a community for people with problems with mental health. The sufferer cut her wrist at the centre and a G.P. was called. The G.P. treated the wound and left. The sufferer then ran off and tried to throw herself under a car. She was picked up by the police and taken to hospital.

Finally, a young child was kicked in the groin by a horse and came home. His mother spoke to a neighbour. The neighbour rang the police as she knew the local doctor was ill in hospital. She spoke to a police doctor who told her to ring 999 i-mediately.

The mother carried out these instructions and an ambulance arrived and took the boy to hospital.

Results from Table 7.3 show that a very small proportion tried to contact their G.Ps. in episodes occurring on the road or in the street area and the greatest number occurred when the sufferer had moved to another site to make the decision. In five of these 99 cases the 'episode' occurred in the street outside the sufferer's home and an attempt was made to contact a G.P. from home. Three of the five cases involved injuries as a consequence of accidents on the road. One elderly lady was riding on a bus and the bus was in collision with a car. She bumped her head and the following day went to her G.P. from home. Two others were involved in road accidents where the police came to the scene and offered advice. In one case the accident occurred very close to the sufferer's home and so the police told him to go to his doctor. He went home and attempted to contact the doctor. In the second case the police took the boy home and the G.P. was contacted from home. He said,

> "I mentioned my injury to the policeman but he didn't seem to think there was anything wrong with me and did not advise me to go to the hospital."

Three cases involved sufferers whose complaint could be coped with at the scene. One had a nose bleed and two had foreign bodies in their eye. Two others had complaints that they brought home and subsequently attempted to contact a G.P.

The one case where the suffer went straight from the site of the episode in the street to the G.Ps. surgery involved a woman who was on her way to the doctor for something else anyway.

In the following pages those cases when the episode occurred in the street or road and the decision to seek medical care was made at the site will be described. In particular, the role of the police and the bystander will be considered in relation to referral to the hospital.

Taking the police first, there are two major types of episode on the road or in the street where the police are involved. One is the area of unintentional violence to the public, usually road accidents, and the other involves intentional voilence to the public through assault or fighting. Of course, there are other 'episodes' which the police are called to such as collapses in the street.

Thirty-five 'episodes' were road accidents: that is, the sufferer was either involved in a collision with a motorised vehicle (including motor bikes) or the motorised vehicle in which the sufferer was the driver or a passenger in came out of control. As was mentioned previously, in three of these cases the sufferer went directly from the scene of the episode to hospital, the vast majority by ambulance. In 16 of these 26 cases the police arrived at the scene. Their involvement in the decision to refer obviously depends on who gets to the scene of the accident or episode first. In many cases the police arrive first, for example, in a road accident occuring on a country road. This is how the sufferer explained what happened.

> "We were on our way to a pub for a drink. We went over a sort or bump and another car was coming towards us and it caught the back of our car and swong it round and it hit a wall. The car was driven by my friend. The car was a total write-off.... I couldn't stop shaking ... somebody brought some blankets out to us."

Four others in the other car were not injured, but the driver of the sufferer's car cut his hand and arm. The sufferer explained his condition:

"I just thought I'd hurt my hand but when I couldn't move it I realised something more was wrong. I was unconscious for a while though and everything is rather hazy ... the people came out of a house and must have told us to stay where we were until help came but as I can only remember my mate asking me if I was all right I really don't know any more."

The police were contacted by local residents who had put blankets over the injured. The police didn't receive a 999 call but the local residents rang direct to the police station. The policeman explained the scene.

"There was quite a few people, there was two vehicles involved in which one had been carrying three passengers, plus a driver. The other vehicle where there were people injured, one driver and a passenger and there was a couple of other people, local residents." No ambulance had been called for. The police said, "When we arrive it was obviously apparent that somebody wanted an ambulance so I got on to them straight away and asked for an ambulance."

The police then carried out their normal work at the scene.

"When you first arrive and see the road is blocked you see we put the police sign in the road with a warning light further down the road so that nobody will come. We look further at the injured. One of our traffic vehicles arrived later and was at the other end, so we could completely stop so nobody could come round because it was on a bend and obviously late at night."

The policeman didn't make a decision about who should go to hospital and left it to the ambulance.

"I presume that when the ambulance came the one with minor injuries was taken as well because he said that he wanted it checked ... No I didn't say to him well you will have to go. I was quite busy at the time when they turned up. He might have gone with him anyway as he was a close friend."

The accident caused the road to be blocked for twenty minutes but this did not acuse much of a problem because the police said little traffic was about at that time of night.

Both drivers were reported as there were allegations on both sides and the case was not clear.

The police said:

"Yes, they were both saying each was at fault, this was a narrow road, both was saying that the other person was towards the centre of the road, more than they should have been and therefore a collision occurred and there was no other marking to suggest who was in the centre of the road ...." The drivers were not arguing "because this chap was obviously injured and I think the other person involved didn't want to start an argument with him and he

didn't want to know."

In other cases the police for a number of reasons do not play such a decisive role. An example is in the following case which involved an injury to a motor cyclist in a town. This is how the sufferer explained what happened.

> "There were two parked cars each side of the road and I was turning as a car was coming up the middle of the road. Some boys were there and I couldn't see the car. I started to brake but the bike started to slip and I came off and the bike landed up underneath this chap's car. He was the only injured person. I thought that I might have broken my hip or some internal damage. I thought I might have damaged my kidneys ... A Red Cross lady came over and asked if I was all right and quite a few people that came up to me advised me to go to the Accident Centre."

It is not clear who called the police (the police were not sure either) but the police arrived. The boy said:

> "The police questioned me at first and didn't seem to think I was hurt. I asked to go to hospital and they called for an ambulance."

The police explained how they became involved.

> "I was notified by personal radio in the panda car. I went to the scene, one of the vehicles had been moved. The only person with any injuries was on the motor cycle and apparently recovered from the initial shock of the accident and I obtained details from the person concerned."

He said that there was no great rush, it was only a "minor sort of thing" and said that perhaps it wasn't necessary to call an ambulance.

> "Possibly not, it's always up to the injured person, they have the choice or whether they go to hospital or not".

He went on:

> "The road was temporarily blocked but when I got out I marked out the vehicles, well there was no great problem there".

This question of how the emergency services are initially contacted is difficult. In some cases, as has been described, the police are contacted directly by a bystander and they contact the ambulance either through the operations room at the time of the call or af-er they have received a call. In other cases the ambulance automatically refer the call to the police to see if they are interested. For instance, one policeman explained how he saw it working.

> "I have known occasions where an ambulance has attended an accident and called us up and told us of the accident. I think on a lot of occasions it's the more serious accidents that we get absolute notification i.e. when both parties are perhaps injured to a somewhat greater degree and in fact the ambulance has been called by a third party who has come across the accident or who has seen the accident happen, then somebody will ring up the police and ask them to attend. Not necessarily because they feel that we might have a job to do there but simply from the point of view of the road is blocked and there is no other person they can ring up. They know very well that the ambulance drivers won't deal with that, they will come along and deal with the people and the trouble is that if the people need hospital treatment you might need somebody else to help."

He then went on to talk about the general public's behaviour when ringing the emergency services.

> "Well they will call the police and the ambulance. I think the men will back me up. I think if it is obvious to people that there is a serious injury involved, I think the ambulance invariably is there without us having to call for it, it's only in cases where probably the injury is not very significant where either an ambulance is called and the police are responsible for calling it. I think when people dial 999 and they are asked what services they want and when injury is involved I thing the ambulance are called. I think that in a lot of cases you usually find that the accidents where the ambulance is called and we then get a call as a result of the ambulance being called, the sort of thing where you have just one vehicle perhaps involved, it's run off the road and the person who has seen it or has called the ambulance doesn't really think the police will be interested because it's one vehicle involved or something like that, perhaps a dog involved, as a result of it somebody has received an injury so they call the ambulance and the ambulance people pass it on to us to say that they are attending. I don't think they pass it on to us expecting us to attend, I think sometimes it's just a question of if it's a road accident they think we might be interested. I have an idea, I mean I don't know, but I think it is part of their policy; they attend at a traffic accident and are involved with injury, they notify us almost without exception. I mean I can't remember an incident where an ambulance has gone to the scene of a road traffic accident where there are injuries and they haven't notified us if we are not already on the scene."

Other police officers were also uncertain about how they received some of their calls. So an interview was carried out with a GPO telephone manager and this is what he said.

> "They (the caller) asked for what they want ... They usually say police or ambulance. If they say police and ambulance you know that the police have got contacts with the ambulance service and really I think that we normally get the police on, because then they can contact the ambulance service." He went on, "If we get a call and someone says someone has collapsed in the street, in that case we would connect to an ambulance. We make a decision but in very few cases we do, it's very rare. But most people would say will you call an ambulance for us. You do know the situation that you are operating when you ask for the number."

Judging from this evidence it seems that when both an ambulance and police are requested the police will get the first call.

In some cases no direct call to the police is made at all. In one case a policeman was informed by another motorist. He said:

> "I was on patrol on the scene perhaps, and a passing motorist flagged me down. He just came down over the bridge and said there'd been a bit of an accident along the road. Following that report I carried on to where the scene of the accident was."

The policeman was first to the scene.

> "They (two cyclists and a motorist) were there, yes, they were still there and the chap himself of course was in a daze but he didn't seem too bad at the time but he was dazed and I called for an ambulanceman..... He wasn't sure whether he wanted to go to hospital or not. I made the decision for him to transfer him, you know a bash on the head .... He had knocked his head which was a bit more to be concerned about and not being a doctor I would prefer to have a professional opinion on such things."

In some cases no direct call is made to the police or ambulance and by chance they happen to be in the vicinity at the time. People have given accounts of ambulances 'just appearing' before anyone called and similar incidents happen with the police. For instance one young man said after he had fallen from his motor bike cutting his leg.

> "The police in a car following me asked if I was all right and I said yes. I was determined not to let them get involved."

The boy went home and was taken to casualty by his father.

In two cases the police arrived on the scene of the episode without being called. One was on duty:

> "I was just on normal patrol in the police car and I came across the scene. I wasn't called to the scene of the accident, I just saw the motor cyclist on the ground. The motor cyclist, who had been in collision with the car, was complaining of great pain in his leg and was in great distress... Well I couldn't see any signs of injury but he was very distressed and he appeared to be in great pain, he said he couldn't walk at all, so I called an ambulance."

In the other case the policeman was off duty:

> "I got to the top of the road and there before my very eyes there was two cars obviously with a line of traffic behind them... there had been a crunch. I'm a rural sergeant, as such I am on duty when I go out. If you are a consultant doctor, you're on duty when you are needed, that's my feelings."

Later on in the interview this police officer suggested that he was worried about the injured person who had banged her head.

> "A woman had a bang but to me it didn't appear much, but one of my past, my job was a first-aid instructor for this division. You don't know with a bang on the head whether it is going to be anything, concussion, compression, a person can be all right here and 24 hours later you've got a sudden death. I was a policeman, it's always safest to say, off to hospital, which is what I did. I called an ambulance, by my phone-radio and got them to attend ....

Then he referred to the man:

> "Well he was complaining of feeling pain and hurt, and if somebody is like that and you've got an ambulance there for another one, the easist thing is to kill two birds with one stone, don't have two different sets of action going. Keep it to one."

The cases described in the above are typical of the circumstances where the police arrive first at a road accident.

In other cases the decision to call for an ambulance is made by others, and by the time the police arrive the sufferers are off to hospital and the ambulance men have given advice. For example in one case a young woman was involved in a car accident:

> "We were travelling from A to B, under 30 miles an hour because of the windy road. This car came round the corner and was unable to avoid us, we were right into the edge of the verge. The funny thing was that he didn't seem to try to avoid us."

Three other people were injured but this woman said:

> "At the time I didn't think I had anything wrong with me but the others were needing more attention ... I asked this man who I happened to recognise to telephone for the police and the ambulance."

She said that she only went to hospital as the ambulance men advised her to go. The policeman who was called to the scene said this:

> "We received a 999 call for an injury, R.T.A. and they said an ambulance was attending. In fact when I got there, the two occupants, well the four occupants of the two cars had already been taken to hospital ... the other two were about to get in the back of the ambulance. If I had been another minute getting there, they would have gone."

He said about the woman in the study:

> "They wanted her to be retained in case of a head injury."

The policeman spoke to the women but was not involved in decisions to go to hospital.

In these road accident cases it is evident that the police and bystanders use the ambulance as a source of medical care. Such policies will be discussed later as well as the preference to use the hospital rather than the G.P. It is noticeable also that in some cases where a person may not have gone for medical care immediately the presence of an ambulance may mean that they are more likely to be taken along with the more seriously injured.

The second group of people with whom the police are involved are those in assaults or fights in streets or public places. There were fourteen cases where the injury occurred due to intentional violence or lawbreaking.

Of these 14 episodes of assaults of some kind causing injury to the patient one case involved a man who was carrying his takings to the bank and was attacked and robbed. He was hit on the head but managed to telephone his wife before collapsing, and she rang the ambulance and the police. One man was stabbed but managed to walk to the local hospital. In two cases the sufferer was beaten up and an ambulance was called. In one case this occurred at a disco and a nurse who was also there treated the man and rang for the ambulance. In the other case a man was beaten up whilst fishing on the beach. He said this about the episode.

> "I was attacked by two muggers who were just looking for someone to beat up for amusement. They tried to throw me into the sea, I knew that if they got me into the sea at that stretch of the beach, I would never have got out again. So I put up a bit of a fight, in the course of which two of them got me down and kicked me in the head ... My son and friends went for the police. I scrambled over to the amusement arcade. By then a crowd had come from the pin tables to see what the police had come for."

The policeman said this was how he was called:

> "If my memory serves me correctly I think one of the sons who actually runs the fun-fair heard the noise and he called us. The general condition of him was that he was very, very shaken and we had to sit him on the chair because he was very shaken and a lot of blood running from his mouth ... He said that he wanted to go to hospital and I thought he should go ... I rang for the ambulance."

In other cases in both assaults and fights in the street (there were five fights) the sufferers were taken to the police station first or went to the police station on their own volition and then referred to the hospital for the injury to be recorded. A similar set of circumstances occurred when a man was bitten by a dog and telephoned the police to press charges against its owner. The police told him that he must go to the accident centre or they wouldn't be able to do anything.

This will be discussed in the final section.

Finally, in this group a youth stole a car and crashed it. The police caught him immediately, arrested him and took him to the police station for the night. The following morning he was taken to the hospital under arrest. It seems, therefore, that with assaults and other types of criminal behaviour, because of the possibilities of litigation, the police tell people to use the hospital and use the hospital themselves to record the injury officially.

Table III showed that the 21 cases involved the sufferer after contacting the police going straight to the hospital from the site. In those cases not involving contact with the police it became evident that many bystanders or local residents were involved in telephoning the emergency services. Some of these were first-aid people from the St. John's Ambulance Brigade or qualified nurses. In 16 or these 17 cases an ambulance was called by a bystander. An example is Case 461, where a teenage boy came off his moped on a main road injuring his knee and wrist. He collided with a car. He said,

> "I'd thought I'd broken both my legs. I couldn't move them and my arms were all crunched up. After I straightened my legs out, I felt quite happy about it."

A nurse who was passing told him to lie still and wait for an ambulance. In another case a young teenager said this:

> "My friend had recently bought another skateboard and he said I could use his old one. I was going down this incline and I got what is called a 'speed wobble' and he said jump off. A fraction of a second later the board fell from under me and I fell backward and my leg bent back at the same time and that was it. I was in agony and had to be dragged off the road." He went on: "A man came by in a car and said he was a doctor and asked my friend but at that moment he didn't realise how I was and let him carry on. I thought I was O.K. although I was sure I needed to get to hospital once I realised I couldn't move ... a few minutes later a passer-by asked if I wanted an ambulance and said to stay put until it arrive."

A further example in perhaps a less serious situation. An elderly man cut his eye after falling in a car park.

> "We had been drinking as it was my retirement. I fell over getting out of my friends car to go to the shops. My glasses broke and cut my eye."

He said he was too drunk to realise what happened and passed out. A bystander apparently took over and 'told everyone to leave me where I was and call an ambulance." The ambulance was called by one of the

shopkeepers nearby.

Obviously, the bystander becomes involved when an individual is immobilised or incapacitated by his complaint and it appears that one of the immediate reactions is to call an ambulance. This is further illustrated by a number of 'collapses' in the street when sometimes the police become involved. In one case a man collapsed in the street. He was on holiday in the area. This is how he explained what happened.

> "Well I'd been to Boots and crossed the road onto the pavement when my legs gave way. I had difficulty getting up someone helped me up and took me to the arcade and jewellers and sat me down. A policeman came along and asked what the matter was. The jeweller brought a chair out and sat me down. A St. John's lady put my feet up. The police constable and the jeweller insisted I go to the hospital. I had no alternative. The PCs first words were hospital and the jeweller rang for an ambulance."

A week before a similar thing had happened. He explained.

> "I collapsed in the market last week. Someone got me a chair. I felt myself going. But we shuffled along and I sat in a car-park attendant's hut and he kindly drove us to the town for me to pick up my car."

In a comparable case no police were involved. The sufferer, an elderly man, explained.

> "I was waiting for a bus and I was talking to some friends of ours and I looked down the road to see if the bus was coming. It wasn't and I turned round to these people again and sort of heard something click and that's all I knew. Somewhere just above my left eye."

The man then collapsed and his wife said that he didn't even remember the ambulance driver giving him oxygen. The wife said that all the people at the bus stop said, "get an ambulance" and a girl in the bus queue went and rang the ambulance.

This evidence suggests that when the individual is incapacitated in some way the bystander normally calls an ambulance and sometimes the police. In none of the four cases where a bystander had contact with the sufferer, and the sufferer went to a different site, was the sufferer not taken directly to hospital from that site.

The implications of this evidence is that when an individual has contact with the police or a bystander after an episode on the road or the street there is a strong probability of an ambulance being called. In the case of the bystander the use of an ambulance is usually made when

the patient is incapacitated. When the police are involved incapacitation doesn't seem to be the sole criteria for sending the people to hospital.

Policies of the police for dealing with illness and injury

There are two specific questions that will be attempted to be answered in this section:

1. Why do the police prefer to use accident centres and not G.Ps.?
2. Why is the police's threshold of urgency lower than the sufferers ? Is it because of ther 'greater' medical knowledge or do other non-medical conditions play a part.

Considering the first question, the evidence has shown that the police have to deal with illness and injury in a variety of different environmental settings and social contexts. In spite of this variety, the evidence suggests that the accident centre (or more specifically the use of an ambulance) is preferred by the police.

Taking accidents on the road and street first, it became evident that whenever police thought that the sufferer needed medical attention they either rang for an ambulance, conveyed the person to the accident centre, or told them to go to the accident centre themselves. If the sufferer or other was not 'co-operative' then they suggested that the person saw their G.P.

It also became evident that the choice between calling an ambulance and advising them to go to a G.P. depended on their assessment of severity of the injury. The policeman's knowledge of medical matters obviously depends on the first-aid training that he received and his interest in first aid. One policeman was a first-aid instructor and obviously felt quite confident about his medical knowledge and had a clear policy for dealing with injury.

M.C. (talking about a case where the police had called an ambulance after a road accident) "You didn't think of saying go home and contact your G.P.?"

P.C. "Not that one, not a bang on the head."

M.C. "But you do on other occasions?"

P.C. "Oh yes."

M.C. "Could you give me an example?"

P.C. "Certainly, kiddie comes off his bike, grazed his hand, grazed his knee, all it wants is a good wash, you know, just an abrasion. Something where the head is involved or where there is any reason to suspect, it's got possibilities because we are not doctors and even doctors quite often need confirmation, a deeper examination, X-rays and so as a policeman you are a complete layman."

He then went on to talk about suspicion of fracture.

> "Depends, if it is convenient, say it's something in the home. It is in a home close to a doctor and somebody else is with them and it's involved in the locality, and a doctor is readily available, i.e. you know that they can go to the surgery, it looks as if it could be a sprain, then you think to yourself, I'm afraid mentally I spin a coin, because you look at a sprained wrist and you think can you move it, yes, how does it feel, go into its size and systoms, what is it. And if you've got a sufficient doubt then I would say go to the Accident Department. But if it is just a doubt which I can walk away from and not be greatly concerned, well I would say go and see your doctor, let him decide but you know, if it is the head or there is any other thing, without consideration, I would say hospital."

Other policemen with less medical knowledge tend to use the hospital much more when they are in doubt.

> "I can only speak for myself but if anybody is injured I tend to advise them that if they have any doubts at all to go to the hospital, even if they don't necessarily go by ambulance but if they have somebody there if they don't want to go immediately to the hospital, then we say well go and see your local doctor and let him have a look and confirm the fact that the injury is only aminor one or go up to the hospital, tell them that you've been involved in an accident and tell them what has happened."

He went on later,

> "I think when you say minor injury the sort of injury that I would consider saying to somebody well at least go and see your G.P. is something like a bang on the knee ... but if you are in doubt at all then the answer is to get him somewhere he can be seen by somebody who is competent to treat."

Thus both these policemen have suggested that they use an ambulance or refer to hospital when they think medical treatment is required. Suggestions about the use of G.Ps. somes in when they think that the complaint is less serious.

This appears to be the general view held by the police. Some policemen suggested it wasn't practical anyway.

> "It's far quicker to get the ambulance I find. Doctors do tend to sometimes, well, obviously they've got other work to do and they say yes, O._. I'm going but I've got to finish a job first. We can understand this ... yes, the ambulance do get there, they do get there and do their job and they've gone."

And the policeman illustrated the time it takes to get a G.P.

> "Well the problem is getting the G.P. there. Quite often because of their work it can take a very long time to get to their patients. I apologise but they do, they can't help it because they've got to fit in with surgeries, on-calls, a very long time, especially if we had to stop and wait everyday. The other day we didn't know who a lady's G.P. was so we had to get the police doctor in to certify death. She was dead and the amublance people could obviously certify death, rigor mortis had set in, so I knew she was dead and it took a good two hours before we could get the G.P., before the G.P. was free to certify death. And when a person is dead of course an ambulance man will not take them to hospital. .... It's just completely impractical for a G.P. to go to a road accident."

Other policemen suggested that the hospital was the best place for emergencies, for example:

> "I feel that hospitals have got everything, well most hospitals, certainly the Kent and Canterbury Hospital has got everything to hand to do emergencies and to deal with such things as road accidents, and other things more serious."

So far, and these types of explanations were predominant in the interviews, 'medical' type explanations have been proposed, other explanations with a different emphasis were suggested.

One policeman suggested he preferred to use an ambulance because it was more convenient for him.

> "We think that if somebody is injured we automatically think ambulance and then when the ambulance comes and that takes away a certain amount of responsibility for us and it allows us to really deal with what we are meant to deal with, you know the other side of the incident."

He went on to talk about other incidents.

> "You see somebody came along to the police station say two years ago and somebody had a heart attack and doing first aid like I rushed over to see what I could do, just then the ambulance came and I was happy for him to take over. I have done what I can to deal with it, and it's their responsibility and I rushed round to make sure the wife was okay ... I think that most policemen think that as soon as the ambulance arrives, over to you, then we can get on with what we've got to do."

One policeman said that they had been conditioned to call the ambulance.

> "You see it's always down to us if an ambulance has already been dispatched and normally we call the ambulance and they are already dispatched, all 999 calls go through the operator and they say there's been an accident, then if there is any injuries, then the operator will put them through to the ambulance and then they will notify us, you know it's a joint thing and they will attend. Apart from that it's down to the officer who actually attends the scene.

> If he thinks somebody is injured then he will call an ambulance."

In the above circumstances surrounding road accidents have been described, but what about other types of incident such as assault or collapse in the street? Do the same considerations operate?

In the case of assault or other law-breaking behaviour the police fell the need to have injuries seen by a professional medical person for the following reason.

> "Well, I would say, quite honestly on a lot of occasions we do obviously have to get medical opinion. I would think in most cases, because if it comes to the Crown Court we are not qualified to say what the injuries are, you know, we've lost cases where the police have given an opinion as to a wound and the judge has turned round and said you are not qualified. You know it's the same with a case of assault and the lawman working on that case was asking for unlawful wounding which is more serious than assault causing actual bodily harm, but you see we've got to prove there was an actual wound involved. The judge turned round and said, you are not qualified, what are your medical qualifications to say there is a wound and we lost the job. It was downgraded, I say downgraded to an assault causing actual bodily harm!"

The policeman then said that he preferred to get medical opinions from the hospital and he preferred to get them as soon as possible.

> "I don't like to wait very long to be honest because I always feel that I like to know the state that the customer is in as soon as I can, and if it is a road accident, I usually say well I'll leave it a half an hour, three quarters of an hour and then phone up, and I phone up probably two or three times, especially if it's a severe road accident."

He did say that only on two occasions had he consulted a G.P. for this kind of incident and he said the circumstances in this case were civil rather than criminal:

> "Not really police business but a wife had been beaten up and he was asked for advice."

Therefore, because of the urgency with which the police need medical opinions, (some opinions are needed within 24 hours if a person is to be charged) the hospital seems to be the preferred place for medical treatment.

The police also use the accident centre for other reasons. One police officer said that it was a matter of economics.

> "I must be honest, you see the thing that might be at the back of their minds, it isn't very fair to Casualty, if we call our doctors

then we've got to pay for them, this is probably at the back of their minds." He went on: "Yes if we call out a doctor, you know, well even if I phone the police surgeon, if we call him out we have to pay for his services. We get a bill for £12 or whatever it is, you know, this is at the back of your mind. But we have to pay for services of the doctor we call out, in respect of a lot of incidents.. So we normally wouldn't do that. (Take an individual G.P.). If we have a prisoner or we have somebody in the cell that we want examined and they insist on their own doctor, then there is a possibility we could get the bill for him ... If for some reason or other we can't get hold of the police surgeon and we call out another doctor, it is possible that we will get charged ....

It's the same with other matters. If we want a vet to an injured dog we are responsible for calling him out, we don't often do it. I think we are brainwashed to call an ambulance. This is basically why we call the ambulance."

Judging from this evidence it seems the police find it more convenient to use the accident centre as a source of medical opinion and treatment particularly for cases where litigation will be involved.

Finally, in this section the question of how the police deal with collapses or illness in the street is discussed.

In these circumstances the police tended to use the ambulance and only rarely are G.Ps. called out. One policeman said this:

"I would say the ambulance was my first source of help because we call for an ambulance because it's quicker, the system is quicker and they can be there, they are usually very quick and a doctor could be on his rounds and you phone the surgery and they say he'll be an hour or something like this."

M.C. "Say you were called to a woman who had collapsed, an elderly woman had collapsed. I mean I am sure in your experience you have come across quite a few of these in the street, you were called across, what would the procedure be in that case ? Would you call an ambulance in those cases?"

P.C. "No, not until I had found out what was wrong."

M.C. "But say she was unconscious, I mean you have no source ...."

P.C. "Well if a person is unconscious there must be something wrong, it could be epilepsy, it could be just blood pressure, it could be stroke, they could have knocked their head, it could be anything, so if a person is unconscious even for a few seconds, then you have got to have a hospital check."

M.C. "Even if you arrived and they were sort of standing up still a bit groggy?"

P.C. "Well it depends, bearing in mind that I am slightly better off than a lot of policemen. I try to train all policemen to have the same approach, first find out what is wrong, what has happened. If you

> find a person is an epileptic and they have been unconscious, well you are not going to send them to hospital unless they have got another injury that needs hospital treatment. You are going to waste everybody's time, casualty time, so you usually ask questions to establish what is wrong and if the person, in the other it may be a person who suffers from blackouts, not an epileptic but through blood pressure or some other illness and there is somebody with them and you find this out and quite often it happens from time to time, you ask the other person, we've got tablets, so you are not going to waste time, you've got to ask questions, to establish what is wrong. If you can't and the person is unconscious and you can't establish that there is a reason for you not to send them off to the Accident Department.

Many other policemen reinforced this position but some policemen did point to special circumstances where they had called a G.P. out or visited a G.Ps. surgery.

> "As you mention it now I wouldn't usually have taken that sort of action but I will say this, on one or two occasions in the village where I come from, it's often been because either the doctor has been in surgery and I have said well come on I will take you in my van and we'd go and see the doctor then. Not so much with a road traffic accident but where perhaps an old lady has fallen over in the street.. She walked from our village down towards the Post Office and there is no footpath as such and she tripped over and badly bruised and cut her knee. I knew the doctor was close at hand and I just sat her down and went and got the doctor, called him out from where he was." He then said if he hadn't known anything about the doctor, "Well most probably, I would have weighed up the situation and however she felt, if necessary I would have taken her to the hospital myself."

To conclude this section it is evident that for all types of accidental injury and illness in the street or road the police tend to turn to the ambulance as their primary source of help. This is because of a number of medical reasons and non-medical reasons which have been cited in the text. Throughout, the need for urgency or speed has been emphasized and this will be discussed in the final section. In cases where criminal behaviour is suspected the police for matters of convenience, economy and urgency, prefer to use the accident centre.

The second question refers to the police's threshold of urgency and what influences it. The evidence presented previously has hinted at a number of different explanations all supporting the notion that when dealing with injury or illness to the general public the police lower their threshold of urgency.

There is ample evidence from the data that given their medical knowledge, the police will tend to err on the side of caution. They emphasise that they are not doctors and their medical knowledge is far from complete. The policy seems to be, if in doubt call an ambulance. Their justification for such a policy is found in the 'atrocity' stories

they recounted in the interview. For example the first aid instructor who is also a policeman said this:

> "Well when you have had a sudden death from a person that appeared not to have been injured through cerebral haemorrhage, then you tend to learn through experience, you know because the person who deals with it, it's not just the hospital, but if it's as a result of an accident, then the police are the coroner's officer. They do the enquiries, they have to deal with the relatives and their enquiries and they are involved from the hospital side, so you learn from the Consultant or the Casualty doctor, you learn from the Sister, you learn from the pathologist and as a result of the experience you gain as you go through the job, you then tend to channel through a certain course of action."

He went on:

> "We sort of tend to be trained to think and I think you will correct me on this if I am wrong, that speed is of the essence with injuries. The quicker you can get a person proper medical attention the greater that person's chances are of recovering (a) from danger, or (b) from any sort of other internal injuries that may have occurred. Policemen don't quite often realise thatwhat do you teach a bloke that has just joined the job, is the fact that he is going to make a decision, it can be a fatal decision, but if you act correctly in the scope of your knowledge, if you can if a person has been injured and you think they need something more than just dipping their finger under a running tap let me put it that way, it's a cut finger so you put it under a running tap, let it bleed a little bit, dry it off and put a sticky plaster on it. It doesn't need a doctor, doesn't need anybody, just keep an eye on it, keep it clean, if it goes pussey go and see your doctor, so you don't have to trouble anybody and common sense deals with it, but you get the instance in road accidents, industrial accidents, and people falling over, they will catch their head or their side in funny places. Handle bars of bicycles have killed people by popping under their ribs and rupturing a liver, and you haven't got a mark on the torso, so you've got different situations where speed is of the essence. If you can get a person in the appropriate centre for treatment quickly enough, not only will their condition stop deteriorating if it's going to be such, but their recovery will be speedy and it saves a lot of money. Not just the fact of the hospital but also to the country, also to employment, people don't realise that speed is the essence, is a life-saver and a money-saver."

This caution appears more to be associated with the moral responsibility to the public rather than a legal one. A number of officers mentioned that they were aware that they were in the public eye but only one suggested that he was worried about being accused of neglecting his duty. He gave an example of an accident victim who refused to go to hospital. He said,

> "You say come on you'd better get it looked at." and he absolutely refused and I thought, well, you put an entry in your pocket book because things are peculiar now. When I first joined the police force you never used to worry about what would happen as a result of your actions but there's always at the back of your mind now what will happen if I don't insist."

This was an isolated case. A more typical case was this.

> "I think he does err on the side of caution ... you see we try and look beyond ... we think if we don't call an ambulance and we let that bloke go home, and he collapses and dies, then that is not very well for us, we are going to feel a certain amount of responsibility. You see obviously we look on it that it costs nothing to call an ambulance, better to be safe than sorry really ... but it's not a legal responsibility for example .... We had an incident only this year where we have a drunk, he was on the steps of his home. It was decided to leave him there, - unfortunately he fell over, hit a basement and died. Now the officer was in tears, you know, he could if he wanted have arrested that person for being drunk and incapable, but as the person was on his own front doorstep that would be a little bit stupid. We would always and I hope our chaps always err on the side of caution... I would rather be safe than sorry."

But the police officer went on to say that in the case of accidents, they have no legal responsibility to ensure people go to the hospital, if they don't want to go, then they leave it. This was reinforced by other statements.

In the previous section, some evidence hinted that policemen, because of the amount of work they have to do at the scene of the accident, will use the ambulance as an efficient way of getting the injured away, so relieving them of the responsibility for looking after the injured, and getting on with their 'real' work at the scene.

One police officer described his work:

> "When there is an accident and people are injured, we have to do a report, in which case there is a lot of details required, damage to vehicle, numbers, drivers, witnesses, injured person or injuries, what they have said, so that we can sum-up roughly who's to blame."

This policeman did deny he was under pressure but others said there was some element of pressure. One policeman said:

> "Whilst you don't get a lot of pressure from other motorists, I've always felt that the sooner you can clear the rubbish, the sooner you can get the vehicles out of the way, and in fact have covered all details that you want on the road, so it's either marked there and you can go back at a future date to get the measurements, one thing and another, or it's all cleared away, the road is clear and the traffic can then move along quite safely. As soon as you are out of the road, the much safer you are and the much safer anybody you are trying to interview is, and so is it much safer for anybody else using that road."

The fear of being injured that this policeman described was mentioned by others. In fact, one of the cases in this study involved a policeman on duty in the road being hit by a car and going to hospital.

Another policeman also acknowledged the pressure but said it did not influence his actions unduly.

> "I think there is a nagging pressure if you like but I am sure that the men will agree with me, you don't let it influence you unduly. I mean if you can get the road clear, but I mean for argument's sake I've been to an accident at Harbledown where those three motor cyclists were involved in an accident, where I had the road blocked for about an hour and a half and there were queues of traffic right back to Canterbury, but that traffic wasn't going to go through until I had finished my work at the scene, the bodies had been moved off and everything else, you know. So it's obviously a consideration and in your terms something we bear in mind but it's not a pressure which you give precedence to over a lot of other things. I mean your first thing is that in a serious accident we are talking about now, is to look after the injured and then to get sufficient evidence to justify or to find out about the accident."

Overall, this evidence does suggest that the police at scenes of accidents and illness may have a lower threshold of urgency than others. This appears to be due to a number of factors. One is their feelings of responsibility, not legal but moral, which lead to them erring on the side of caution, and because of their feelings about the inadequacy of their medical knowledge. These situations also may lead to an immediate call for an ambulance so as to free them to get on with their own work. The urgency with which this work is carried out is also influenced by the pressure to get things back to normal again for everybody's safety, not least their own.

Previous evidence has shown that in other types of incidents where the police have arrested a person or are intending to arrest a person, the use of the accident centre occurs because of the urgency with which a medical opinion is needed on a complaint.

Finally, in this section data presented in this chapter has thrown up the significance of two other actors in the process of referral to the accident centre. One is the bystander through advice or calling the emergency services, and the other is the ambulance personnel who was to play a significant role in making decisions to take people to hospital. In many cases, as has been shown, the ambulance arrives on the scene before the police and take the victims to hospital before the police arrive. As yet, we have no evidence on how the ambulance men make decisions but it is evident that in the vast majority of cases they transport a person to hospital rather than a G.P. or taking him home.

With regard to bystanders' behaviour, the evidence is limited. Both a policeman and an ambulance man attempted to explain bystanders' behaviour. The policeman said this.

"People don't know what to do in an accident, we need some third party there to sort out the injured ... and also sometimes you get an ambulance called and you in fact go to the scene and I have known on occasions, it's not very often admittedly, but there are occasions when you get to the scene and perhaps somebody has hit their nose on the dashboard or something and a serious nose bleed, so there is a lot of blood around and you stop somebody who might be passing by have a look, and say my God blood, you know, it must be a serious injury and they will call an ambulance and the ambulance will get here and by the time the ambulance has got here the bloke is saying I don't want to go to hospital thank you very much, I'm quite alright- there is nothing wrong with me, in fact I've just had a nose bleed and then of course the ambulance then carries on and returns back to wherever it's going."

The ambulance man offered a different explanation.

"You see so many people ring the doctor's surgery, either they don't get a reply or they don't get a satisfactory answer as far as they are concerned and they think O.K. we'll beat the system, we'll ring 999 and dial for an ambulance."

Obviously such limited data is inconclusive and further evidence is needed not only on the role of bystanders at accidents or other episodes and also on use of ambulance services in general.

4. Episodes that occurred in recreation areas

In a number of cases the episode occurred in a recreation area. The definition of a recreation area includes both those locations where recreational activities take place over a short period of time such as sports fields or social clubs and those locations where people are living on a temporary basis such as camp sites or caravan sites where people are on holiday. In the former case the provision of services for the ill or injured may be only necessary to cover a short period of time while the activity is taking place, whereas in the latter provision of services would be necessary over a 24 hour period as it would be for any holidaymaker resident in an area. Table 7.4 shows the distribution of these episodes by choice of medical care setting, status of advice giver or decision taker and site of decision to seek medical care. Even though in just over half of the cases the site of the decision was somewhere other than the episode (which usually meant the decision was made at home) . In only 17.5% of the cases was an attempt made to contact a G.P. Certainly, if the site of the decision was made at the site of episode or not didn't appear to be related to choice of medical care setting.

Episodes that occur on caravan sites or camping sites

Of the 80 cases, seven involved episodes occurring on camp or caravan sites and a further four occurred whilst the sufferer was on holiday outside the country. In two of these seven episodes occurring on a camp or caravan site an attempt was made to contact a doctor. One of these cases involved a family staying at a camp site. One of the children suffered headaches and the parents decided that she needed medical treatment. They told the warden on the camp site. He tried to contact an emergency doctor but was unsuccessful. The following day the child was still in pain so the warden suggested that they should go along to the accident centre as the local casualty department was closed. In the other case an elderly lady was involved and she sustained a fractured wrist at a holiday camp where she was staying. She explained how it happened.

> "I was going along to the ballroom and there were two steps to go down. I think I twisted my ankle. I remember going down the first step but I went down and fell on my arm ..... I think I had a suspicion of my hand going I think that I blacked out after then .... I can vaguely remember someone carrying me to the ballroom and sat me in a seat and took me to the first aid room in the camp and they got a doctor."

The first aid man who was on call at the camp said this.

> "Well this happened as near as I can remember somewhere round about 10.00 p.m. and the first thing that happens in any thing like that, the manager rings me up, I only live five minutes away and I come straight in. She was already in here. I took one look at it, she'd got a strap on the wrist, I put it up on a splint, I rang the doctor who was on duty that night, got his authority to get an ambulance because at that time of night it's got to come from A to here then to Canterbury."

He explained the need to get medical authority.

> "Well the thing is that a couple of years ago and it happens now, you get campers coming in here who are used to medical services being on the button. Anything happens at home they just get on the phone, get an ambulance, it's only got to come two or three miles, perhaps not that, come straight to the place and whips them into the nearest hospital and they tend to do that here, well you see an ambulance has got to come from A down here at night without medical say so, you know, they get a bit upish about it, the drivers and we have had trouble, so the sort of cases now down here, if an ambulance is wanted, especially for a case like this, a walking case, you've got to have medical backing, so rather than risk the ambulancemen comeing in say oh well this woman could have got to CAnterbury under her own steam, she couldn't, hadn't got a car, there wasn't a car available, so rather than risk an argument about it, I ring the doctor first, then ring an ambulance and he will back it up. Well that's the answer to that one.

In the other five cases no attempt was made to contact a G.P. It is interesting to note that one of these cases also occurred on the same holiday camp. In this case a woman sprained her back whilst playing

sport at the camp. She didn't intend to do anything about it apart from rest, until her husband injured his arm and was referred to the hospital by the first aid man on the camp site. She went to the hospital with her husband and received treatment at the site.

In one of the remaining four cases the mother of a young child was worried about lumps on the childs arms and face and took him to hospital. The family weren't registered with a G.P. anywhere and the mother said she preferred to go to hospital anyway. She said.

> "The doctor never knows what's wrong with you and only gives you pills."

In each of the four other cases the sufferer or sufferer's representative did not have nay contact with any 'official' on the site and no medical facilities were available. One man explained his action of going direct to hospital.

> "We didn't know any doctors around here. I got in the car to try and drive myself to A.E.D. but I was in too much pain so my wife decided to call an ambulance."

In the other three cases the respondents identified the hospital as the appropriate setting for treatment in terms of the need for specialist treatment.

Policies for dealing with illness and injury on camp and caravan sites

Judging from the limited evidence in the above, the majority of decisions to seek medical care for episodes which occur on camp or caravan sites are made by the sufferer or sufferer's family themselves. The evidence shows that medical facilities are not normally available on caravan or camping sites and patients do not normally seek advice from any available officials. Thus decisons are based on their general orientation to the use of a G.P. as opposed to the accident centre and on their knowledge of the availability of G.P. for temporary registration.

In the limited number of cases where officials or medical facilities and personnel were available, attempts were made to utilise a G.P. In the case of the holiday camp, a G.P. was regularly on call and could visit the camp regularly. Owing to the distance to the nearest hospital, much depended on the nurse who works for the camp and then the G.P. on call. So unlike most caravan or camping sites where no facilities or personnel exists to treat injury and illness and patients make their own decision to seek medical care in this case most of the patients all referred through the male nurse or the G.P. on call. Unlike in other contexts such as where

the police are involved, or teachers or employers, in this context a G.P. is easily accessible and the staff of the camp prefer to use him as their source of professional medical help.

The male nurse explained the position.

> "The doctor will put stitches in. I put stitches in myself if I feel that I can do it. I will never do it unless I ring the doctor first. I say I've got somebody with a split eyebrow, I think it needs a couple of stitches, shall I put them in and he says yes... If I can deal with it, I will deal with it, having such things as, over a weekend you get somebody going hot and cold, have a cough and they are bringing up phlegm, alright and they've got a bit of a temperature, I ring the doctor and say look I've got so and so, can I start them off on some antibiotics which I keep, I keep a few antibiotics and rather than call the doctor down here about three o'clock or four o'clock on a Sunday night or a Saturday night, I say can I start them off on this and they say yes, and we'll see them on Monday morning. There is no point in them coming out. There is nothing else you can give them, there is no place open, this is another difficulty here and if the gremlins at the back of my mind say well I don't think a doctor is really necessary, but they are the ultimate responsibility at least tell them over the phone, if they say they will see the patient all well and good. If they say Oh I am not going to come down for that, you deal with it, I have shifted the responsibility. If anything happens I can turn round and say well I have told the doctor."

The male nurse says the accident and casualty department are used but only when the facilities are not available on the camp or in the G.Ps. surgery. Even in medical 'emergencies' a doctor is called. For example.

> "Well yes usually, well it's usually a Saturday or a Sunday when there is no doctor around and I got called out and she had had a stroke. I got her into her chalet and we managed to get her undressed, got her to bed and I rang the doctor and I told him and he said well there is nothing very much I can do, he said I don't think we can get her into hospital even, he said he would ring around and we couldn't get her into hospital and he came down and had a look at her. She wasn't all that bad, so she was sensible enough to, you know, do this. So I came over here and I got a crepe bandage and I made it into a ball and took this across to her and I said well you keep doing this and that, kicking her leg out as much as you can, do it all night, keep doing it and I said we'll see how we get on in the morning and by the next morning she was moving her hand, moving her arm, and the doctor came in and saw her and he said well you really ought to go to hospital. She said oh I don't want to go to hospital, she says I've only got another three or four days here, can't I stop, so he said well alright stay, and she stayed here and she finished her holiday."

With regard to the question of the lowering of the threshold or urgency, the male nurse said he did but he didn't feel it was because of fear of litigation. He said.

> "Well you see I think, I tend to err on the side of caution but when you get down to brass tacks, your health is your only responsibility in law. If you don't go to the doctor, there is nobody on this earth can make you go to the doctor. If you don't want to take a doctor's advice, there is nobody on this earth can make you take the doctor's advice. So that applies to yourself. If I chopped my hand off and I didn't want to go to the doctor, alright that is my affair, I am the one that ultimately takes the responsibility but if I am dealing with somebody who can come back then I must shift the responsibility. I am not qualified to take responsibility, not to that degree, where decisions have got to be made."

It appears that the male nurse feels it is not his responsibility for making decisions about other peoples health so he refers to the doctor. This may influence his threshold of urgency and he referred to another more social dimension.

The interviewer asked the First Aider if in fact there was much pressure on him because it was a holiday camp to keep ill health and injury away from the rest of the camp because it would spoil the other visitors holiday. In reply to that point he told how when the first group of old people come in, he goes round the dining rooms and the chalets trying to find out or assess those people who may be suffering from a complaint such as a heart problem, or heart disease which may lead them to a serious illness or even death on the camp. He said that he did this regularly, because he wanted to keep death away from the camp because, as he said, in the cases where there is a death on the camp, the coroner and the coroner's officer spend at least six hours on the camp before the body is taken away, and this would obviously disrupt the workings of the holiday camp and upset a lot of the people who are staying at the holiday camp. In these particular cases, when he suspects people are suffering from serious illness, what he does is to either tell them that they had better actually go back and see ther doctor because they won't enjoy their holiday, or in fact he sends them up to the doctor to be checked and they may be taken up to the hospital. He emphasised that he does that to prevent similar episodes occurring. Prevention is only to protect the persons ill health but also because he did not want to disrupt their holiday activities and the atmosphere of the camp.

It is difficult to generalise from this example, but the evidence suggests that when an official or medical personnel are present on holiday camps they feel that they have to be cautious with their visitors for both medical and social reasons. In this particular instance the lowering of the threshold of urgency had limited implications for utilisation of alternative medical settings as the casualty departments were too far away and a G.P. was therefore utilised in most emergencies.

Episodes occurring on recreation fields, in sports or social clubs and other recreation areas

Of the remaining 68 cases in this group, in only 13 cases was there an attempt to contact a G.P. In five of these cases the attempt was made at the site and in the rest the attempt was made at another site mainly in the sufferer's own home.

The most common settings for these episodes were:-
Sports centre (mainly on squash courts); sports fields (mainly on football pitches); recreation fields and orchards, woods or fields. A small number occurred in social clubs or disco's and at racing circuits. The remainder occurred in a wide variety of settings ranging from a cinema to restaurants and public houses.

Eleven episodes occurred in sports centres and in two of these attempts were made to go to a G.P. although both these attempts were made after the sufferer walked home. In only three of the remainder of the nine cases did the sufferer go direct to the hospital from the sports centre. It appears with these three cases as with others in this group, relatives and friends seem to play a significant part in deciding what to do. For instance, one man who lacerated his leg whilst playing squash was told to go to hospital direct from the sports centre by his brother and friend. He said.

"It was 'Hobsons choice'. I have to go. They insisted."

In another case a young man ruptured his achilles tendons whilst playing in a sports centre, said.

> "My friends' made the decision to seek medical care. They couldn't give me any advice except to go to the hospital and in the meantime to keep still."

Another example involves a man who bruised his ankle whilst playing in a sports centre, he said.

> "One of the people we were playing with was a nurse and she said to go and run it under the cold tap."

It appears then in this group of 'episodes' which happened at a sports centre, the main participants in decision making were apart from the sufferer mainly relatives and friends. No mention is made of first-aid people or sports instructors. Decision seem to lie almost entirely with lay people and their informal networks.

23 episodes occurred on recreation fields and eleven of these on a sports field. Most of the injuries incurred on the sports field happened during formal sports activities such as a football match. In two of the eleven cases a G.P. was contacted directly from the sports field. On one occasion a young man incurred swelling and abrasions to his ankle whilst playing football. He said that he couldn't walk on it. A bystander who he didn't know rang the local doctor for advice who in turn advised the accident centre. In the other case a young man incurred a fracture to his right hand whilst playing football. After it happened he carried on playing. He said.

> "I thought it was just badly swollen, nothing serious .... It was giving me a lot of pain but I didn't think it was serious as I've done it before."

After the match the football team trainer who usually acts as a first aid man for the team told him to go to 'his own doctor about it'.

The following day the young man followed these instructions but found the surgery closed and so went to hospital.

Of the remaining nine cases four went direct from the sports field to the hospital. In both cases the injuries had stopped the sufferers participating in the game. In one case a young man described how it happened.

> "Well just running down the football pitch and I slipped over and my knee came out and the goal keeper come out and straight into it and bump..... The trainer came one and put water on it, there wasn't much he could do really."

He continued playing but it became very painful and,

> "It got very stiff and I couldn't move."

He told the manager of the team.

> "He just told me to go and have it checked at the hospital and all that."

He then went off in his friend's car to the local cottage hospital. In this particular case injuries incurred on the football field are reported to the team manager who issues a sick note and sends it off to the insurance company.

In the other case a girl was injured whilst playing football. She too was given advice by her team manager. She said this.

> "The captain asked me what was wrong. I said I just think I've pulled a muscle and she said well there is not long to go to half time, just go and get some spray. And the manager asked me if I wanted to go back on, I said yes because there can't be long to go to half time, so I went back on and that was all that was said."

However, at half time the injury became worse. She explained.

> "Well when everybody went back on the pitch I couldn't go back on because I couldn't walk and he (the manager) carried me to the car and he told me to explain to him what I felt in my leg and he said it sounds as if you've pulled the ligaments and you better to to the hospital."

She said that she could possibly have put off going till the following day. She said.

> "I could have done. I expect so because the manager asked me who my doctor was and he didn't know if he would be in surgery because it was a Sunday so he said I'd be better off knowing what I had done so it would be best to go to hospital as a doctor might not be here and it might be worse than what they'd thought."

From this evidence it appears that the pattern of help seeking behaviour for injuries incurred on the sports field depends on a number of factors. One of these is whether the team has a trainer (first-aid man) or manager who if present seems to act as 'expert' about injuries and what should be done. It seems in minor cases the injury is treated by the trainer and the injured person resumes play. In cases which involve the player not being able to participate the manager or trainer usually recommends the hospital if he feels professional medical care is needed. Whether this is due to his beliefs about the unavailability of G.Ps. at weekends when most football matches are played or due to beliefs about appropriateness of that setting for that type of injury is difficult to know. What is also interesting is that of the seven cases who went to another site for a decision all seven went home and subsequently decided to go to the hospital.

12 episodes occurred on a recreation field and 13 episodes occurred in fields, woods or orchards. Of the episodes occurring in a recreation field, four went to the hospital direct from the site of the episode and the rest from home. In only two of these twelve cases were attempts

made to contact a G.P. and both these were made from home. In the four cases where decisions were made at the site of the episode bystanders seem to play a part in decision taking. In one case a young boy broke his wrist, he said.

> "A man ran over and looked. I said I think I'd better go to hospital and he agreed. He was not the man that took me."

In the 13 cases that occurred in woods, fields and orchards, six involved decisions being made at the site of the episode. In these 13 cases only three involved attempts to contact a G.P. and two were at the site of the episode. These two cases involved special circumstances. In one a man collapsed and died whilst working on his allotment and a relative called his G.P. and in the other a man in the army injured himself on a cross country run and was sent straight to the M.O.

It appears then for episodes that occur in both recreation fields and in woods, orchards and fields when a decision to seek medical care is made on site the hospital is seen to be the most appropriate place. The decisions seem to rest almost entirely with relatives, friends and bystanders and thus lay knowledge or beliefs about appropriate medical settings must be examined. Certainly evidence has shown that lay people do have specific ideas about what conditions are serious and when they are not and when conditions should be seen to. It is also evident that many people are loathe to make decisions to seek medical care for children who are not their own. This is suggested by the high number of injuries incurred on a recreation field which were taken home before a decision is made.

Of the remainder of cases, four occurred at social clubs, four on racing circuits and 13 in a variety of other settings. In only four of these 21 cases was an attempt made to contact a G.P. and two of these attempts were made at the site of the episode. One involved an elderly lady collapsing in a public hall. In this case her doctor lived across the road from the hall so was called. The other case occurred at a riding stables and the sufferer rang her G.P. immediately.

In the four cases occurringon a racing track the sufferers went direct to hospital from the track. In all four cases the sufferer had contact with the St. John's Ambulance who referred him to hospital. In one of these cases the sufferer injured his right leg whilst a motor cycle racing. In this case the St. John's Ambulance

"Just put a bandage on it so I could drive up to the hospital... The first aid man and the doctor at the circuit. They told me to come to the hospital."

The sufferer also mentioned that he had to go to the hospital following the doctors instructions because of the insurance. In a similar case involving an injury in a motor cycle race a young man received attention from the St. John's Ambulance men. The man reported what they did.

"They put me on a stretcher and took me back to their post where the injury was treated and dressed and they said for safety's sake, and tetanus injuections, I had better to to the hospital."

Given the wide variety of environmental settings involved with this group, it is difficult to make generalisations about the most common pattern of action. In the majority of cases people in formal capacities were not involved and many of the decision makings was made by patients, relatives, friends and sometimes bystanders and there was little evidence of influence from 'officials'. In settings where first aid facilities were available and sometimes personnel trained in first aid such as in sports centres, on sports pitches or at racing tracks, the hospital seemed to be the most common choice for medical care. Only rarely was a G.P. contacted from the site of the episode and in these cases it only occurred when the G.P. was in easy reach.

Policies for dealing with illness and injury in recreation areas

Given the small proportion of people in official capacities involved with these type of episodes, it is difficult to present evidence on reasons for choice of medical setting. In the previous section, the position of first aid men on sports fields had been briefly described and further information from them as well as from bystanders about the reasons for the apparent preference for the hospital in those circumstances would have been useful. In some social clubs and sports centres specific facilities and specific policies have been set up to deal with members injuries and illness. For instance an interview with a person responsible for a sports centre and for a swimming pool took the following form.

R. "If a member of staff is approached after an accident, they then take over, take them into the First Aid Room, examine them and if they think it necessary then arrange for them to be conveyed to Canterbury Hospital. On some occasions they even taken them over in their own cars, but if the injury is in their opinion of a serious nature, then they ring the ambulance and the ambulance comes and takes them across

I. "Do they ever contact a G.P?"

R. "No."

I. "Why is this?"

R. "Well we've never thought it to be necessary. The injuries received are mostly of a minor nature, cuts and bruses mainly and sprains but if we suspect as we have done on several occasions, that there is broken bones, then we run them to Canterbury Hospital, the Accident Section and advise them we are either bringing someone over or that we have rung the ambulance station and, you know, they are bringing them over."

I. "O.K."

R. "We do on occasions after someone has received, shall we say, an injury that we think is minor, advise them to contact their local G.P. the following day, we may do this."

I. "Yes, so you have advised them on occasions to see their G.P.?"

R. "Oh yes, yes."

I. "So normally then, when somebody is injured, they will go to you first aid room and ...."

R. "Well, can I put it this way, mm, we can only be aware of an injury if it's brought to our attention. Staffing at the centre is very limited, normally there is no more than a Duty Supervisor and two attendants to virtually police the whole of this building and they could be on some occasions engaged in coaching so there is not a visual supervision at all times of the centre court when clubs are using it. When the members of the public are using it, as individuals then a visual exercise is undertaken as supervison, but when clubs use it then it's up to the club's organisers to ensure that supervision takes place on their own club resources."

I. "So you would prefer would you to send them to the hospital if you thought that it was necessary?"

R. "Yes, when in doubt we feel that it is best to get the correct, you know, expert treatment and advice rather than suggest treatment here or even try and do treatment here."

I. "I see."

R. "We have been told that, you know, when in doubt take them to hospital."

He described a similar policy for the swimming pool. He said that mainly minor cuts occurred there and when they needed stitching they

they were taken to the accident centre. It is evident that in both these settings, sports centre and swimming pool, the source of medical care that is always used is the hospital. In serious cases of near drowning which may occur in the swimming pool and ambulance is called. In those cases where the sufferer has recovered sufficiently, the staff take that person home.

5. Episodes occurring at home and decisions to seek medical care

Table 7.5 shows for all those 'episodes' that occurred at home, where the decision to seek medical care is made, who the sufferer had contact with at the siteof the episode or at the site of the decision to seek medical care and if an attempt was make to contact a G.P. The reason for focusing on the home is that in the CSA's proposition the home appeared to be the place where it was most likely that sufferers would (or should) follow their routine pattern of health care seeking and go to their G.P. Results presented in the previous chapter suggested that such a pattern did tend to occur although there was still a large proportion of patients who went direct from home to the hospital without attempting to contact a G.P. In this section the aim is to attempt to find out why these patients behaved in this way.

Table 7.5 shows that no all patients made the decision to seek medical care at the site of the episode. 12.8% of these sufferers went to another site before a decision to seek medical care was made. This figure is misleading in some ways because in some cases although the decision to seek medical care was not made at home, it was made only a few houses away. Thus it seems arbitrary from an analytic point of view whether the neighbour or friend comes to the site of the episode or the sufferer or sufferer's representative goes to another site. In six cases contact was made with a neighbour to either ask for advice about what to do or to ask to use their facilities such as a telephone or transport. This suggests once again that the idea of classifying when and where a decision to seek medical care is made is useful from an analytical viewpoint but does not reflect the processual nature of decision making which occurs in reality. In two of these six cases a neighbour whose occupation was an ambulance driver was consulted. A young man who cut himself went to the ambulance man for basic treatment because the cut would not stop bleeding. The ambulance man swabbed and bandaged it. No other advice appears to have been given and the young man decided to go to hospital immediately. He said he didn't think of

attempting to contact his G.P.:

> "Because it wasn't that sort of problem ... he would have sent me to the hospital anyway."

In the other case a young child was involved. It is difficult to know whether patterns of seeking health care for children are different to those of adults. There is evidence that there is more continuity of contact between G.Ps. and families with young children compared with other groups. In this particular instance no G.P. was involved. This three year old child crushed his right third finger and this is how the mother accounted for it.

> "Well, he was getting his pram to go out with my daughter and I don't know if you've seen the baby buggies, there's a lever at the back, well sometimes if you go over a step you put your feet up to help the pram down, well she pushed it down as they were going out the front door, and his finger was caught on the side."

The child screamed and the mother rushed to see what was wrong. She said:

> "I wasn't really sure because I couldn't see much for the blood and I held it under the cold tap, and I could see it was all cut, so I rushed him up to Uncle. He looked at it, but couldn't be sure, except he thought it was quite bad."

The husband wasn't at home at the time and she went on:

> "We ran up the road to the ambulance man (off duty) who said to get him to hospital as soon as possible and called an ambulance."

The mother said that she hadn't thought of contacting her G.P. because:

> "I'm not sure if you can get them over a weekend can you? It's very difficult to get an appointment, far less get a doctor at the weekend."

In two of these six cases attempts were made to contact a G.P. for the sufferer. One elderly lady who had cut her head at home said this:

> "I walked round next door and they felt I should see the doctor... so they rang for me and he came straight away."

Of the 24 cases, 11 sufferers made their decision to seek medical care at work. In none of these cases was an attempt made to contact a

G.P. Some of them being referred by industrial nurses and some being coerced into going by their workmates. Examples from these cases illustrate how the hospital staff uses the casualty as a source of medical help. A sixteen year old who had cut herself at home said:

> "Mum advised me to go to hospital because my cut looked worse than hers and she thought I might need a stitch... I didn't think it necessary .... Two days later I was doing my voluntary work at the hospital when the Ward Sister suggested that I come to the accident centre and get a dressing on it."

Of the remaining seven cases out of the 24 where an episode occurred at home but the decision to seek medical care is made at another site, four cases involved sufferers visiting relatives' homes where a decision to seek medical care is made. In two of the cases an attempt was made to contact a G.P. In one of these cases it appears that a young mother of a child who had injured his nose obtained conflicting advice. One of her friends had told her not to bother as it would be O.K. and another, who she went to visit, said she thought it looked as if it may be broken. The mother took the latter's advice and rang her G.P. from her friend's home. The G.P. wasn't available and the practice receptionist referred the child and mother direct to the hospital.

In each of the three remaining cases the hospital was involved indirectly. In one case a patient was attending the hospital gymnasium and was referred by the staff to the accident centre after the staff had examined him. In the two other cases the patient was visiting someone else in the hospital. In one case the patient had a sore eye and she said:

> "My future mother-in-law to be and I were at the hospital waiting for my father-in-law to be to be seen to .... My mother-in-law to be suggested that I should go to the desk and ask if they could see me."

The other case was more complicated but once again illustrates the point made previously about the use made of casualty by the hospital staff. This elderly woman had made arrangements with her friend who lived across the road from her to pick her up at a hospital after visiting her husband at hospital. She said this:

> "I went across the road to my friend's whose daughter is the casualty night sister at the hospital, B. I asked her if she would meet me at the hospital, A, and bring me home after visiting my husband. I spoke to my husband's ward sister at the hospital, A, about my complaint and she told me to come

back to the Casualty at hospital A at 9 a.m. the next morning. However when my friend saw how much pain I was in she said she would take me into hospital B. I was glad to go."

Table 7.5 shows that in these cases where the site of the episode was at home and the decision to seek medical care is also made at home the majority of sufferers if they had contact with anyone at all, then it was usually a relative or a friend or neighbour.. However, in 9 cases other people were involved.

In three of these cases the police were involved. Two of the cases involved elderly people living by themselves and being found by neighbours who telephoned the police. The police on both occasions telephoned for an ambulance. Both these cases have been referred to in the previous section. However the third case involves a man in his fifties. This is how he said that he received his injury:

"I was sitting here talking to my sister and my son was upstairs and his girlfriend was up there and they were arguing and shouting rather a lot. I went up there to tell them to quieten down and not make a noise because the neighbours have children next door and they were trying to sleep. You can hear through these walls. I just opened the door to get nearer and he just lammed out at me ... My son very often wears a heavy ring and I think the injuries have been caused by the ring rather than the fist .... I was unconscious. My sister came up when she heard the bump and saw me lying on the bed unconscious but she said I came round a while later."

The man's sister said:

"The boy was holding him up and they were both covered in blood all over the bed and everywhere."

It's not clear who contacted the medical services. At some point the police arrived and an ambulance was called. Whether the police called the ambulance or the son's girlfriend is uncertain. The son's girlfriend may have contacted the police initially.

Whilst the man wasn't able to make a decision to contact the medical services himself because of his state of unconsciousness, he did suggest that if he could have made a decision he would have gone along to the accident centre anyway. He said:

"It was a hospital injury..... I've had accidents at work and I've used it. Fractured foot, X-ray on hands. So I choose it when necessary.

He said that for urgent complaints that he would use the hospital because:

"You're not sure if you can get him (his G.P.) in and the doctor's too busy anyway. The hospital is always available."

In two other cases the episodes occurred at home but a passer-by became involved. In one case a man, who lived by himself, explained what happened:

"I was getting my breakfast and I'd been upstairs to the toilet and when I came down, suddenly without warning I made all this mess on the floor ... It was terrible I don't know how it happened. I was perfectly fit and on top of the world, rushing around like I always do. I honestly didn't know what was wrong. I hadn't got a clue. I've never been to the doctors for ages or needed him for myself."

He went on to describe how he contacted the passer-by:

"I banged and banged on my neighbour's wall and blew and blew my whistle but no one came. I managed to drag myself to the front door when I blew again, a Mr A Chairman of the Council was passing by and he went and called an ambulance for me ... I don't usually by-pass the doctor but in this case I think it was too urgent."

The passer-by, an acquaintance of the sufferer, explained how he became involved:

"I was walking the dog along the road. I heard a whistle being blown and I thought it a bit funny. I saw the door of this house open and didn't know if it was a child playing but I thought I would go and see. I called out "Is there anything wrong?" When I noticed this man on the floor .... He was a bluish colour. He had obviously been sitting on a pot which was pretty full. I moved it away. He kept saying 'I've had a heart attack'.... He kept on repeating himself and I wasn't too sure if it was a try on".

This man obviously doubted the validity of this man's claim and was concerned to get him off his hands. He said this:

"I hadn't made up my mind as to whether or not he was genuine. To be quite honest I wanted to get him off my hands although he needed some help of a sort I did'nt seek anyone else's advice. I didn't know whether this man was on the 'phone so I went out and asked this person across the road if I could use their 'phone to dial 999."

An ambulance was called and the man was taken to hospital. It is clear from this case that the urgency with which medical attention was sought was influenced by the passer-by wanting to get the troublesome patient off his hands although the evidence also suggests that the patient had made up his mind that an ambulance was needed.

The second case involved a man, once again living by himself, although this time in a more isolated country location. He explained what happened:

> "I got wet doing a job to help a chap with some fencing. It was that cold snowy morning. I ached everywhere, legs, my feet, hands and chest. I've got acute bronchitis so they tell me.... I got up Sunday morning and was staggering. I honestly thought I was on my way out.... I didn't know what was wrong at the time. All I knew was I needed help badly and I'm so cut off down the lane where I live".

An acquaintance was passing by his house and he called to him:

> "I told him how ill I felt and he made me a cup of tea and went and got his van and said he'd take me to the accident centre".

He said he didn't try to contact a G.P. because before then he had been trying to fight it off and on the Sunday morning a doctor wouldn't be available. He explained:

> "There was no doctor's open if I'd 'phoned you don't know when he's free to come. I didn't have strength for anything. No, by Sunday I was so desperate that I was glad Mr A offered to take me to the Accident Centre, I thought I was dying."

These two cases are clear examples of the significance of the influence of passers-by, even when episodes occur in the sufferer's home, in utilisation of the accident and emergency department.

In the four remaining cases, two of which involved an attempt to contact a G.P., the people who were contacted by or contacted the sufferer were a warden of an old people's home, 'welfare lady' at the clinic, taxi-driver and a doctor. In the last case the sufferer lived next door to a doctor. The doctor was called in after the sufferer burnt himself in a fire and this is what he said the doctor did:

> "He (the doctor) looked at it and said it was better for me to go to hospital and get the treatment as he was busy."

So far all the cases cited have involved either the sufferer going to another site to make a decision to seek medical care or a person in a formal capacity becoming involved with the decision making. Either of these elements could be influential in the choice of care system. Although Table 7.5 suggests that an attempt to contact a G.P. is more likely to be made when the decision to see medical care is made at home, this reinforces the findings described in the previous chapter.

In the introduction to this section the stated aim is to examine why some patients go direct from home to hospital after being involved in an episode at home without attempting to contact a G.P. Is it because of some element in the sufferer's situation that has yet to be identified? In the above some of the potential elements were discussed, e.g. the role of people in formal positions. However, the remaining data refer to only those where an episode occurred at home, a decision to seek medical care is made at home and the sufferer had contact with only his family or his neighbours and friends. Table 7.7 suggests that sufferers who contacted friends or neighbours may be less likely to go to the G.P. than those who only contacted relatives.

In four cases out of 19 the sufferer or sufferer's representative attempted to contact a G.P. In three of these four cases the sufferer received advice from neighbours about where to go for medical advice. In two of the cases the sufferer or parents of the sufferer went to the neighbours for advice. The neighbours told them in both cases to go to hospital but also in both cases the mother and the sufferer respectively decided to contact a G.P. In the other case the neighbour told the sufferer that he would have to go to the doctor which he did. Of the remaining 16 cases, three involved conditions that were non-traumatic. One involved a young child who had a fit. The mother rang for an ambulance whilst the father went to the neighbour. The neighbour administered first aid. In the two other cases, one involving persistent nose bleeds and the other 'a lump in the throat' friends suggested the hospital to the patient. Their reasons for not contacting their G.P.s was that it (the hospital) was the obvious place to go for the case where the sufferer had a nose bleed, and for the other case the sufferer didn't attempt to contact a G.P. because she didn't think he would come and see her. Certainly, it appears for some traumatic complaints sufferers or sufferer's family, friends and neighbours have specific ideas about what kind of treatment is needed and where to get that treatment. For example a 21 year old man cut his hand; his girlfriend was reported by him as saying this:

> "As soon as she saw it needed stitching and she cleaned it up and bandaged it."

They went direct to the hospital. Other people are sought out or give advice because they are believed to have 'expert' knowledge. For example, a woman dislocated a bone in her shoulder. She contacted her neighbour"next door but one. She works at the hospital and she advised me to go there". In another case the 'expert' wasn't a nurse or

attached to the hospital in anyway. In this case a woman sprained her ankle and she explained what happened:

> "When I cam indoors I was in terrible pain and the ankle was enlarged but within an hour you could see it gradually getting bigger and bigger and I went to bed and rested it thinking that by morning it would be a lot better, but by the morning I couldn't even put my foot to the ground."

Sufferer - "Well that night we didn't think, I didn't sort of give it a thought to go down to the hospital when it happened, because I didn't think, you know, it was that serious enough. I thought well, I'm not one to worry them. I thought they've got enough to cope with, so I thought, well, I'll rest it and by morning it would go, but first thing in the morning, M A. (her boyfriend) said no, straight to hospital."

M.C. - "Has Mr A. had any medical training."

Sufferer - "No, he's had two broken legs .... he knows about these things and he also does recovery work for the police .... accidents and all that sort of thing so .. he knows. He's not medically qualified but he's seen enough accidents on the road."

M.C. - "Did you think of contacting your G.P.?"

Sufferer - "No, straight down to Canterbury, because I thought if I call out my own doctor on a Sunday morning, the first thing he is going to say is well I think it needs X-raying because of the size of it and the pain. If I went to the Cottage Hospital they would turn round and say exactly the same, so straight away we went to Canterbury."

How widespread this approach to the use of the hospital is difficult to know. Certainly this woman not only received advice she felt was expert, but had a specific strategy of her own. She said:

> "If I think it's necessary to go to the hospital I will rather than waste the G.P.s time and for quickness I go down there.... I wouldn't go there for the least little thing, but I think if hospital treatment is necessary then I would go there, especially with the children -... if the children had colds or something I'd just 'phone the G.P. .... If the G.P. wasn't available, especially for an emergency, I would go straight to hospital."

It also seems that in the case of trauma lay people have knowledge about when a cut, for example, needs stitching even though they don't believe it is serious. One woman said this about how she distinguished a serious cut from a not so serious cut:

> "Well you can usually tell, can't you, if somethings .. I mean if I was to cut a finger indoors and it was sort of, I could see the bone and then I would think, that to me would

> be very serious but I know, I mean, when I did my lip it wasn't serious to the extent that, how can I put it, I knew I had to go to the hospital to have it look at, because I couldn't do anything with it myself and they dressed it and put the stitch in."

Now the evidence from these 19 cases suggests that, given the limitations in the population sample, when neighbours give advice the hospital rather than the G.P. is seen as the most appropriate source of medical care. Whether this is due to the type of complaints presented to neighbour, i.e. neighbours have specific ideas about what goes where (the evidence presented here although based on a small number of cases doesn't support this) or whether it is due to neighbours being asked for advice when the siutation is seen to be an 'emergency' and so the hospital is seen to be the appropriate place for conditions requiring urgent medical attention or whether it is due to neighbours when these are put in the position of adviser or expert they tend to be more cautious because of the moral responsibility of taking risks with other people or other people's children is open to question.

Table 7.5 shows that in 23 cases the sufferer did not have contact with anyone before going to or attempting to go to the medical services. These cases involved adults only as children whose parents make the decision for them are categorised under contact with relatives. As the table shows just over a third attempted to contact a G.P.

In eight of these 23 cases the sufferer had a complaint that was non-traumatic. These are of interest because it might be expected that they would be more likely to involve an attempt to contact a G.P. In two of these cases an attempt was made to contact a G.P. One of these few cases involved a suspected heart attack to an elderly lady. This is how her husband described what happened:

> "We think it was a heart attack but when we got her to the hospital they said there was nothing wrong with her. I came home and found her lying on the bed as white as a sheet. She suffered loss of breath and terrific pains across her chest and around her back."

Their suspicions about these symptoms being a heart attack seem to stem from her history of 'slight heart attacks and she is on tablets for it.'

Her husband described what he did:

"She lay for about three quarters of an hour waiting for me to

> come and as soon as I saw her I ran across the road to the doctor."

The husband said he knew that she needed urgent help because of his experience 'as a nurse on a hospital ship'. The husband went to his doctor's surgery nearby but he could only see the receptionist as the doctor was 'on call'.

It appears that this man always goes to his G.P. for professional medical help. He said:

> "He's my physician, he's the man I rely on. If he thinks it's necessary, then he would send me to hospital."

The husband said the receptionist rang for an ambulance. The receptionist had this to say:

> "I thought it was probably a heart attack. She had got severe pain, mid chest. She'd collapsed on the bed and she was very distraught and her husband couldn't make very much of her. He came straight over to me. She had been on tablets for the heart for about two to three years so I felt that it was rather important that she was seen straight away."

This receptionist said that she had referred patients to the hospital when the doctor wasn't around.

> "Well, if it was a severe laceration, I would think the best thing then (to go to hospital) or epistaxio, then I would say yes, straight round to our local cottage hospital, where they have got the facilities for at least stopping the bleeding prior to seeing the doctor .... I would in the case of someone having had a fall, an elderly person having had a fall. Back last year and I couldn't get hold of a doctor there and then and I thought that was important because just .... I suppose sometimes you get a feeling and I just had a feeling that she had probably fractured a femur and she had, then yes, I do get in touch with the ambulance and get them direct down to the hospital and in a case like a heart attack, if I thought it was a heart attack and the doctor wasn't here, yes, then again."

According to the hospital in this case both the husband's and receptionist's diagnosis proved to be wrong but the husband still felt his action of going to hospital was justified. He said

> "Even if it was a scare it was the proper thing to do ... if the G.P. had been available he probably would have done but it was wisest to go."

The second of the non-traumatic cases where an attempt was made to contact a G.P. involved a young woman who had an eye infection. She explained how it started.

"It started in the morning and got worse by the afternoon.... I had a suspicion what was wrong because in December I had had a similar thing in the other eye, which they had trouble diagnosing (at another casualty). They said it was just an eye infection."

She decided to try to contact her G.P. on Sunday evening but he wasn't there and then she tried to contact some friends.

"My husband's at the A and we happen to know one of the people who is going out with a doctor and it occurred that she may have someghing to cure the pain until I could get to the hospital but we couldn't in fact get hold of either .... There was no one else to contact .... My husband would have preferred to get hold of the G.P. because when I got back from B at Christmas I had been to see him to get some tablets and therefore he knew about it, but the only other thing we could do was to visit the Casualty department."

They visited the casualty department that evening but were dissatisfied with the diagnosis and treatment given so on their return home attempted to contact their G.P. again.

"Several hours later we came back her, it was seven o'clockish and the thing just got worse and worse and worse and at about half past nine we tried again for my G.P. His daughter answered and said that he was on holiday and she gave use the name and number of the man who was standing in for him. I rang him and said this had happened and he came round within ten minutes, took one look at it and rushes back to the hospital and got some stuff to put on it."

Apart from the urgent nature of the conditon (the woman described the event as an emergency using medical criteria) this couple were planning to go on holiday the following day and treatment was needed urgently also because of this.

In another two the sufferer had had contact with a medical practitioner previous to going to the hospital. In one of these cases the patient was suffering from toothache and was referred by a casualty doctor in a London hospital to the accident and emergency department at Canterbury. In the other case a woman explained what happened:

"My stomach pains started on the previous Tuesday. I hung on as long as I could. A relief doctor is on duty on Tuesdays. He left some pain killers at the Cottage Hospital for my husband to collect. On the Wednesday the pain and sickness was still there and I had finished all the tablets. So I went to the doctor again and saw my own this time. I was given more pain killers. I was still being sick so I rang the doctor again. This time I saw the doctor's partner who examined me and thought I had an ulcer so he sent me back home in a taxi and called for an ambulance."

In the other four cases no attempt was made to contact a G.P. Two sufferers said they didn't contact their G.P. because they anticipated that their G.P. would have referred them to hospital anyway, one

sufferer it was the weekend so his G.P. wouldn't be available, and in the other case a female sufferer with ear trouble said she didn't go to the doctor because she doesn't 'get on with her'. Her source of medical help is the Family Planning clinic and if they are not available she goes to the hospital. She said:

> "I never go to the doctor's. She's got no time for me and only seems to care about kiddies.... She doesn't like me and I don't like her."

Of the fifteen cases where sufferers had a traumatic condition, five patients attempted to contact a G.P. In one of these cases an elderly lady had gone to her G.P. for her routine check up. Her G.P. had noticed an injury to her wrist and sent her to hospital. Of the remaining 10 cases one person didn't have a G.P. in the area as he had only recently moved to the area and was using the hospital as his source of medical help. In the other cases, two sufferers said they didn't attempt to contact the G.P. because it was the weekend and similarly one said it was the evening. One sufferer said he wouldn't have been able to see the doctor if he had tried to contact him, and another said the doctor would have sent him to the hospital anyway. Another didn't think his G.P. was competent and preferred the hospital, and another thought his condition was inappropriate for his family doctor as it was too trivial. The three other sufferers were more positive about their reasons for using the hospital. Two of them suffered from foreign bodies in their eyes and said that the hospital was the more appropriate as it had specialist treatment facilities for their conditons. In the other case the sufferer said it was more convenient. He said:

> "I wasn't sure of the surgery hours and also the hospital is so near. I thought casualty was the simplest way."

His routine policy for matters of health was simple:

> "If it was conventional like flu, etc., I would go to the doctor, but if it's an accident I'd go to the hospital."

For those people then who didn't have contact with anyone about going to the medical services, over a third attempted to contact their G.Ps. A slightly higher proportion of those with non-traumatic conditions went to their G.Ps than those with traumatic conditions. One of the whole group of the 23 had not registered with a G.P. Reasons for not contacting a G.P. varied but one of the most frequent was that at the time of the decision to seek medical care the doctor would not be

available.

In the vast majority of cases where the siteof the episode was at home and also the decision to seek medical care was made at home, the sufferer had contact with a relative. Of these 109 cases, just over half (56 cases) involved parents making decisions for their children, mainly younger children. Of these 56 cases, 24 involved an attempt to contact a G.P. (42.8%) compared with 23 (43.4%) of the remaining 53 cases. Thus there is little difference between the two groups in terms of the likelihood of an attempt being made to contact a G.P. Certainly, this group as a whole, ie., 109 cases, involved the highest proportion of patients who attempted to contact a G.P.

Evidence collected in this study cannot show if patterns of help seeking behaviour are different from those for other age groups. However, these data can highlight some of the special circumstances or conditions that parents of young children are confronted with and how these circumstances or conditions appear to influence choise of medical care setting.

In one case involving a young child who had some foreign body stuck up his nose the mother had planned to go to the doctors. She said:

> "What happened was that I rang up the doctor last thing at night he said O.K. come down in the morning, then there was the complication that I couldn't go easily down to the doctor because my father-in-law couldn't come in to get them. I rang up the doctor to say I'm afraid I won't be able to get in in time, and the receptionist said to me, there is a good chance that you might have to go up to the accident centre anway, if its something in the nose, so just go up there and don't come down here. That was really how I came to go to the hospital."

She went on:

> "I must admit I didn't think of hospital at all. I was going to the doctor. The problem was that I wasn't going to be able to get to the doctor's surgery in time, and the receptionist told me to go you see."

The mother was critical of her G.P. for sending her to the hospital She said this:

> "Several times I have been told by the doctor, told by the surgery to come up to the hospital when I have been prepared to go to a G.P. and would expect to. Sometimes when I don't think it's necessary."

She emphasised the inconvenience of going to a G.P.:

> "Having no transport is a great trouble. The G.P. always says get him up to the accident centre. Well we haven't got a car and I've got five children and it's not easy for me to go up. Thank goodness I've got a lot of really super friends but one doesn't want to be for ever on the cadge, it's far easier for me to go to my doctor. I've never welcomed being asked to go up to the accident centre."

This account has highlighted the problem of lack of transport and what to do with other children in the family especially when another is ill which appears to have a great influence on parents choice of medical care setting.

In a number of other cases parents of young children attempted to contact their G.P. but were unsuccessful and ended up receiving advice from the receptionist. For example a parent of a young child who had cut her right hand whilst playing at home rang her doctor. The mother said:

> "I rang up the surgery and spoke to the receptionist and she told us to apply pressure and take her straight to hospital."

The receptionist said this:

> "Mrs C phoned and said the child had cut her hand very badly, she couldn't stop the bleeding and it was quite open and she asked me what to do, should she take her to the accident centre and I said well yes I thought that was the best thing."

The receptionist outlined her strategy for dealing with certain complaints:

> "I mean if somebody is bleeding quite hard and needs stitches well the best place is the hospital, straight away there .... If somebody has obviously fallen and broken a leg or done something like that, the best thing is to get an ambulance and get them to the hospital, if they ring through and say that they've fractured or got a breakage somewhere."

She also said that she didn't expect the doctors to stitch cuts at the surgery and said:

> "They (the doctors) would prefer that they went straight to the hospital."

Other receptionists told how they dealt with parents of young children. One talked of a specific case where a boy had injured his wrist and the mother had telephoned the doctor. The receptionist said this:

"Well it seemed an obvious injury. He couldn't grasp anything with it and it was an odd shape and the mother said it was swollen and it seemed to me that it was an abvious bone injury and worth while going up for an X-ray."

She explained how she generally dealt with cases when the doctor wasn't around:

"Well I ask them their symptoms. I've been doing this job for a long time, just ask the symptoms, see, you know what and just suggest that they may possibly go up to the hospital for treatment. For instance, I get mothers ringing up where young children have taken their pill, or swallowed some other noxious substance and in that case I just advise them to take the child straight up to the hospital, this is what we do..... I have to act on my own initiative because they are worried and obviously in trouble and you offer the first help you can. Sometimes they ring when they ought to use their own common sence and go anyway."

According to this evidence the accident centre provides a significant source of help for the receptionist when the doctor is unavailable. Also, it appears, that some receptionists believe in some cases patients should go directly to the hospital without bothering a G.P. For example, one said:

"Yes, it saves time if they go straight to the accident centre. Head injuries anything like this."

This receptionist also went on to describe the criteria on which her policy of referral to the accident centre is based. She emphasises the importance of not taking risks:

I. "And what about a sprained ankle, how does the doctor deal with that?"

R. "Well you don't know if people have got a sprain. If people phone up and say they've got an ankle injury, if the doctor's here I say well come in, but if I am here on my own and no doctor is available and possibly not until the next surgery which might not be for another five or six hours or even the next day, I suggest they go up for X-ray because a lot of people have what they think is a sprained ankle and they find they have actually fractured a small bone. After all there are more bones in the feet than there are anywhere else aren't there."

I. "What about in the case of collapse?"

R. "I don't even wait to ask the doctor what to do, I get an ambulance round there straight away because while I am waiting for him, you could have somebody with a coronary or it may just be a straight forward faint but it's always to err on the wrong side and get them brought up and if I do get a collapse I do that and then tell the doctor, what I've done. Well for instance one evening I was here and a man had gone home from work and found his wife unconscious.

Well he didn't know if she had taken an overdose but even if she had I took a chance, got a ambulance to her but it so happened she'd had a haemorrage, so I couldn't get into the doctor immediatley and I think I saved about ten minutes you see by doing that. You just use your common sense. I probably err on the cautious side but I'd much rather send 99 cases up and find they are alright rather than not send the hundreth and find its been a heart attack or something."

This receptionist although not having any first aid training or qualifications herself said that because she had always worked in administration and because she's had four children she has enough common sense to know what to do in any emergency.

One of the most common methods used by a receptionist to judge whether the episode in question was an 'emergency' and thus justified being sent to hospital, was the reported time lapse between onset of the episode and contact with the surgery. For example this interaction occurred whilst the interviewer was interviewing a receptionist:

Mother "My daughter injured her finger four days ago, it has not improved and the school nurse has tried to puncture the nail but has been unsuccessful. What should I do?"

Receptionist "Well you could bring her to the treatments room here at the surgery for a nurse to look at it, but if you think it may be broken you should go to casualty. You say four days ago ? Well in that case it cannot be called an emergency. I think you had better let the doctor look at it then and let him decide. Would you like to come to the surgery at 5.30 ?"

Table 7.6 shows the distribution of explanations from patient or patient representatives for not contacting a G.P. These date ahow in a quarter of the cases the patient felt that at the time of the decision to seek medical care their G.P. would not be available. A further 26.6% said that if they had gone to their G.P. the G.P. wouldn't have treated them or that they would have had to wait a long time for treatment. Only in 27.7% of the cases did the patient have something positive to say about the hospital, i.e. that it was the appropriate place because of the availability of specialist treatment or more generally it 'was more convenient'.

To summarise the findings from this section on episodes occurring at home it is evident that compared with other contexts there appears to be a much higher proportion of patients who tried to contact their G.P. Only a small proportion of episodes involved the influence of outsiders such as strangers or the police, and this appeared to occur when the sufferer lived alone. However, neighbours played an important role in information

giving. The majority of suffers had contact with and were given advice by a parent or spouse only and this group had the highest proportion attempting to contact a G.P. The predominant explanations given by patients or patients' representatives for not attempting to contact a G.P. where the unavailability of G.Ps. i.e. at the time of the decision to seek medical care the G.Ps. surgery wouldn't be open, or that the G.P. wouldn't have treated the sufferer's conditon anyway so it would be best to short-circuit the system by going direct to hospital. It is interesting the importance place by patients on the availability of G.Ps. in explaining their not attempting to contact a G.P. It seems that patients believe doctors are available only on weekdays. In the evening and at the weekend they cannot be or shouldn't be contacted.

It is also interesting to note that just over a quarter of the patients had specific ideas about the appropriateness of the hospital for their complaint, and thus in these cases a G.P. wasn't seen to be relevant.

Conclusion

In the last two chapters, using evidence gathered from people involved in 'episodes' which occurred in educational institutions, situations of employment, on the road and in the street, in recreation areas and in the home an attempt has been made to answer the following two questions:

1. Does the presence of a policeman, teacher, employer or other at a site of the episode make a marked difference on the course of action that the patient follows?

2. If the policeman, teacher, employer or other does make a difference, why does this difference occur?

In regard to the first question, evidence presented in both the previous chapter and this chapter suggests that when an episode does occur in either of these different settings, and contact occurs with either teachers, employers, police or bystanders, then there is a stronger probability that the patient will go to an accident centre than to their G.P.s.

The reasons for this vary according to the setting.

1. In educational institutions teachers seldom or never took children to G.Ps. or brought G.Ps. in for medical reasons, for reasons of convenience and also for ethical reasons.

2. In work situations employers or representatives of the employer took or referred employees to the accident centre rather than G.Ps. for reasons thatcould be described as medical, reasons of convenience and efficiency and reasons that could be loosely termed economic.

3. In episodes that occurred on the road or in the street police preferred to use the accident centre rather than G.Ps. because in the case of road accidents or illness in the street, the ambulance was the most important source of help and ambulances went to the accident centre. The reasons given for use of the ambulance were medical, reasons of convenience for both the patient and themselves and reasons of economics. In other cases where criminal behaviour was suspected the accident centre is used as a source of medical opinion for use in litigation.

4. In episodes that occurred in recreation areas sufferers had limited contact with officials such as wardens, managers or first-aid men. Much of the decision making involved lay-people mainly family, friends and bystanders and when a decision was made at site the preference seemed to be toward the use of A.E.D. In the cases where people in 'official' positions were involved such as first-aid people and managers at holiday camps, sports fields, racing tracks and sports centres, the preference seemed to be towards using the accident centre although in some cases G.Ps. were used when accessible. The reasons for the preference for the accident centre seem to be mainly because of easier accessibility.

In all four different settings there was evidence that the teachers', employers', police, first-aid officials' and bystanders' evaluation of the urgency with which medical care was required was coloured by what can loosely be termed non-medical factors.

1. In the case of school teachers, emphasis was put on the legal position of being in loco parentis and thus the need to err on the side of caution. It is not clear how much the moral position of looking after another person's children plays a part.

2. In the case of employers, the evidence suggests that whilst some firms are concerned about employees' health and welfare

they do put an emphasis on the needs of the company and their threshold or urgency is coloured by the need to get men back to work as quickly as possible or to minimise the inconvenience caused by disruptions.

3. In the case of police, their threshold of urgency seems to be coloured both by a certain moral responsibility which they feel as a police officer and pressures put on them by other aspects of their work, whether it is at an accident or involved in an episode where there was intentional law breaking.

4. In the case of first-aid personnel at recreation settings the limited evidence suggests that episodes involving injuries or ill health are dealt with quickly as apart from concern about the sufferer's health, they upset the flow of activities in the setting and also upset the atmosphere in which these activities should, according to the staff, be carried out.

In the final section sufferers who were involved in episodes at home were examined. Compared with episodes occurring in other contexts there was a high proportion of cases where an attempt to contact a G.P. was made especially when both the episode and the decison to seek medical care occurred at home. Although neighbours and outsiders did play a part in decision taking in the majority of episodes the decisions were made within the family. The reasons given by sufferers or sufferers' representatives for not attempting to contact their G.P. could be divided into three different types. One group emphasised the unavailability of G.P.s at certain times of the day and the week, another group said that they went direct to hospital as they had anticipated that their G.P. wouldn't have examined them anyway and the third group said that because of the facilities available at hospital that was the most appropriate place. These data suggest that the majority of patients wouldn't go to their G.P. for certain conditions even though they believe he is available.

Table 7.1: Site of Episode, Site of Decision to seek medical care, Contact with representatives of an educational institution and attempt to contact a G.P. or not

	Site of Episode in educational institutions				Site of Episode outside educational institutions			
	Decision at site		Decision not at site		Decision at site		Decision not at site	
	Contact with Ed. rep.	No contact with Ed. rep.	Contact with Ed. rep.	No contact with Ed. rep.	Contact with Ed. rep.	No contact with Ed. rep.	Contact with Ed. rep.	No contact with Ed. rep.
Attempt to contact a G.P.	1		9	1			1	
No attempt to contact a G.P.	7		7	4	5		2	
Total	8		16	5	5		3	

Table 7.2: Site of Episode, Site and Timing of decision to seek medical care, contact with representative of employer and whether attempted to contact a G.P.

	Episode at work						Episode not at work			
	Decision at site on same day		Decision at site but following day or more		No decision at site		Decision at site		No decision at site	
	Contact with work rep	No contact with work rep.	Contact with work rep	No contact with work rep.	Contact with work rep	No contact with work rep.	Contact with work rep	No contact with work rep.	Contact with work rep	No contact with work rep
Attempts to contact a G.P.	3		2		2	9			1	
No attempts to contact a G.P.	29	7	7	3	7	11				
Total	32	7	9	3	9	20			1	

Table 7.3: Site of Episode, Site of Decision to seek medical care, Contact with Police or bystander and whether an attempt made to contact a G.P.

	Episode in street or road						Episode in other place					
	Decision at Site			No Decision at Site			Decision at Site			No Decision at Site		
	Contact with police	Contact with bystander only	No contact with either	Contact with police	Contact with bystander only	No contact with either	Contact with police	Contact with bystander only	No contact with either	Contact with police	Contact with bystander only	No contact with either
Attempt to contact a G.P.			1	2		12	1					
No attempt to contact a G.P.	21	17	8	8	4	26	2			4		
Total	21	17	9	10	4	38	3			4		

Table 7.4: Patients who were involved in episodes in recreation areas (which include recreation fields, parks, recreation buildings such as sports and social clubs and caravan, camping sites and holiday camps) and site of decision to seek medical care, if advice given and choice of medical care setting

	Episodes that occurred in recreation area			
	Decision at site		No decision at site	
	Decision made by patient or relative and no advice given by other	Decison made or advice given by person other than patient or relative	Decision made by patient or relative and no advice given by other	Decision made or advice given by person other than patient or relative
No attempt to contact a G.P.	9	23	15	18
Attempt to contact a G.P.	1	6	5	3
Total	10	29	20	21

Table 7.5: Site of episode at home, site of decision to seek medical care, contact with relative, friend or other and attempt to contact a G.P. or not

	Episode at home							
	Decision to seek medical care at home				Decision to seek medical care elsewhere			
	No contact with anyone	Contact with Relatives only	Contact with friends or neighbours	Contact with others	No contact with anyone	Contact with Relatives only	Contact with friends or neighbours	Contact with others
Attempt to contact a G.P.	9	49	4	3			3	1
No attempt to contact a G.P.	14	60	15	6		2	13	5
Total	23	109	19	9		2	16	6

Table 7.6: Explanations of patient or patient's representative for why no attempt was made to contact their G.P. after being involved in an episode at home and making a decision to seek medical care at home

Explanation	No.	%
Not appropriate time - at weekend or in evening	15	25.0
Specialist treatment at hospital	7	11.7
Obvious place to go	7	11.7
Doctor would have sent to AED	6	10.0
Wouldn't have been able to see G.P.	5	8.3
Too long a wait at surgery	5	8.3
Condition not appropriate for G.P. - too trivial	4	6.7
More convenient	2	3.3
No transport available	1	1.7
Doctor wouldn't have come out	1	1.7
Not registered with a G.P.	2	3.3
Other	5	8.3
Total	60	100%

Chapter 8

Discussion and Implications for Policy

This chapter will be sub-divided into two sections, each of which will answer a specific question. In the first section the question will be as follows:

> "In the light of the evidence presented in the three preceding chapters, how useful is the C.S.A's proposition to an understanding of patients' utilisation behaviour?"

In the second section the following question will be discussed:

> "What are the implications for policy of the findings described in Section I of this chapter?"

1. How useful is the C.S.A's proposition to an understanding of patients' utilisation behaviour?

The Casualty Surgeons' Association have emphasised that the vast majority of patients tend to utilise the accident and emergency department when they find themselves in a "social predicament", this being their definition of an "emergency". Defining a social predicament is difficult particularly in the light of the emphasis made in Chapter 2 about the need to explain the idea of social predicaments within a wider framework of patient demand, i.e., with the status of the layman being one where he is capable of engaging in thinking and theorising about the world and thus being capable of making choices about the type of action which is necessary in the light of the distrubance in body functioning and therefore also making distinctions between the type of treatment available. This is an important point as it is an attempt to move away from the traditional approach which has been coloured by the views of the 'providers'.

Accepting this premise the C.S.A's argument is that, irrespective of whether the patients routinely go to the doctor for all types of complaints, and whether or not they would choose different medical settings for different types of complaints, or they depend on others' advice about what to do, there are certain social predicaments which would limit the patients' choices of action even if a choice is perceived. Thus in general terms, a social predicament imposes limits on the patient's alternatives for action. Obviously, this has more significant implications for the patient who would prefer and usually does take all his complaints to the G.P., or for the patient whose complaint is believed by family and/or self to warrant

specifically G.P. treatment.

This general definition of a social predicament raises problems when an attempt is made to translate it into empirical observation. Clearly, the examination must be in terms of people's action and behaviour because it is essentially people who make the decisions. How they make sense of the influence of certain social conditions is another matter. This is a crucial point in that the 'objective' social conditions identified by the researcher may be translated by the layman into something which is meaningful for him but is different from that identified by the researcher. So the layman may not 'know' what the researcher identifies as influencing his behaviour even though he has his own rational reasons for his action. Thus the policeman may not have thought about the socio-legal pressures on him to act in a certain way but they may have an influence even though he accounts for his action in terms of emphasising his knowledge of medical matters.

How then is a social predicament defined empirically? In the broadest sense it is when the patient's G.P. or a G.P. service becomes difficult to reach. It must be remembers that the C.S.A. see the casualty service as a community emergency service in that its primary function is to meet the needs of the community as opposed to the family practitioner service whose function is to meet the routine medical needs of patients and their families. So what is meant by the notion of community 'need'. There seem to be two different aspects which are overlapping. Firstly, there is the socio-environmental location of the episode itself, for example where an episode occurs outside the home of the patient or the patient's place of residence and medical care is needed. In some of these cases the patient may be by himself or with relatives or friends and the only aspect which is different from his routine decision making in matters of health is the location of the decision. Thus, availability or access to a G.P. may in these circumstances be perceived to be limited. This may also apply to situations where the patient is visiting or staying in a different area from the one that he lives permanently in and where he is registered with a G.P. Arrangements are available for temporary registration with a G.P. but for those people whose visit is for only a short time the appropriateness of such an action may not be seen to be relevant. The second aspect of social need centres upon those people who are said to provide a community service such as policemen, teachers, employers etc., and through their work have a need to utilise an emergency service. Their threshold with which medical attention is required may be lower for a number of reasons and thus the need for urgent medical services may be more

important than in the home. The other aspect to this is the role of the bystander, stranger or neighbour in these community situations. It is argued that whilst such individuals are not influenced by socio-legal pressures they are influenced by moral pressures, feeling that this 'ought' to do something when faced with a person with a health problem or being seen to be 'neighbourly'.

They are two aspects of the social predicament and there may be others. In this study an attempt has been made to assess the influence of predicaments on people's behaviour. We have been mainly concerned with the question, "What part do circumstances play in influencing the type of medical care system which is utilised?" Before this evidence is discussed there is a need to assess the proportion of patients attending the accident centre who have been in circumstances that the C.S.A. would classify as social predicaments. If it is found that a large proportion of patients are involved in these 'social predicaments' then the C.S.A's proposition should be examined in more depth. If, however, only a small proportion of patients are involved in these predicaments, then either the C.S.A's proposition is of limited significance and other explanations are required or it is a matter of incorrect classification and a new classification should be developed.

In the first instance the discussion will concentrate on the two aspects of social predicaments that were described previously. The question of those people without G.Ps is not relevant here as those people still could in theory go to a G.P.'s surgery for treatment or advice. For those staying for only a week in the area there is a possibility of them registering with a G.P. temporarily. However, for those passing through the area in a day or less the possibility of registering is limited. This group only consist of less than 1% of the group and would not have been in their own home so they will be included in the analysis.

Table 8.1 shows the distributions for both these aspects, ie., socio-environmental location and the status of the decision taker. By using the status of the decision taker this excludes those cases where the patients or a member of the patient's family made the decison to seek medical care but was given advice or information by another individual who may or may not have been influential in the decision taking process. Using these two different aspects, what proportion of the cases could be said to be classified in this way? According to the C.S.A. definition, one of the legitimate ways of coming to casualty is through the G.P., so this group needs to be treated separately. The Table shows that in 16.0%

of the cases it was reported that an attempt was made to contact a G.P. from home and in a further 6.3% of the cases- it was reported that an attempt was made to contact a G.P. from a site outside the home. Overall22.3% attempted to contact a G.P. and 14.0% actually spoke to a G.P. either over the telephone or saw him at the surgery. Thus in 77.7% of the cases no attempt was made to contact a G.P. 16.2% of all cases involved a decison to seek medical care being made outside the home by a person other than the patient or the patient's relatives. A further 20.9% of all cases involved a decision to seek medical care being made outside the home by the patient or the patient's close relatives. In addition 3.2% of all cases involved a decision to seek medical care being made at home by someone other than the patient or patient's relatives. So overall, 40.3% of the cases involved some of the aspects of circumstances referred to in the above. Finally, 21.8% of the cases involved a decision to seek medical care being made at home by either the patient or the patient's relatives.

These figures suggest that in two-fifths of the cases patients were involved in two of the types of circumstances that C.S.A's proposition refers to. These data suggest therefore that the proportion may be of some significance.

The second part of this first section will involve discussion of the analysis which specifically examined the C.S.A's proposition that 'social circumstances' play a significant part in influencing a patient's choice of medical system. Given the research design, this question cannot be answered fully. However, the objective of the analysis was not only to provide part of the information but also to point to areas of importance for future research.

In the analysis, the relationship between a number of factors and the initial choice of medical care system was examined. The objective of this is to estimate the relative importance of each of these factors on choice of medical care system. However, we wanted to examine whether lay assessments of the complaint in terms of the urgency with which medical attention was required or in terms of people's specific ideas about the type of complaint which is appropriate for different medical care settings, was associated with initial choice of medical care system. In other words if it is shown that patients perceptions of the event as an emergency or perception of the urgency with which medical attention is required, or that the type of complaint is related to their choice of medical care system and that the site of the decision to seek medical care or the status of the decision taker is not related, then the C.S.A's proposition,

according to this evidence, is rejected.

The results from the analysis suggested that both of the circumstantial factors, that is the site of the decision to seek medical care and the status of the decision taker, were related to the choice of medical care setting. A number of other factors were also found to be related to choice of medical care setting. These were the type of medical condition, age and sex of patient, time and day of week of decision to seek medical care, patient orientation to medical care, patient perception of the emergent nature of the condition and the time period between onset of episode and decision to seek medical care.

A further more comprehensive analysis was carried out in which the relationship between the circumstantial variables and choice of medical care setting was examined after each of the variables described in the above was allowed for. In each of the analyses the circumstantial variables, in particular site of decision to seek medical care, still produced marked differences in choice of medical care system. Some of the other variables, in particular type of clinical condition, still produced difference in choice of medical care system after the two circumstantial variables were allowed for.

Given the suggestion of a statistical relationship between circumstances and choice of medical care system in the preceding chapter, some kind of explanation for this relationship is examined.

In the earlier chapters the principles on which the C.S.A's proposition are based were spelt out. The C.S.A. define emergencies in terms of social predicaments. These social predicaments do not just involve sufferers but also other people and these 'other' people such as policeman, teacher, employers, bystanders, are in some cases, the most important part of the predicament. It is argued that, because of these people's duties and commitments, what would appear to a layman if it occurred at home to be an episode of limited significance, would be more likely to be seen in terms of an emergency if it occurred in the community and medical attention would be seen to be urgently required. Thus 'urgency' is a concept in this context which is related to events that occur in the community and which consist of a combination of lay medical knowledge and semi-official medical knowledge from officials as well as being coloured by non-medical influences such as socio-legal and moral pressures.

In a second part of the analysis an attempt was made to examine this proposition. In the previous analysis it became evident that site of

decision to seek medical care could be associated with choice of medical care setting and also the amount of time between the episode occurring and the decision to seek medical care was also related to choice of medical care setting. In the second analysis these two factors were combined into an outcome variable and used an indicator of the urgency with which medical attention was thought to be required. For example, those decisions made at the site of the episode within a short period are seen as the most urgent. The analysis was carried out to see what was associated with this outcome. If the C.S.A's proposition was to be upheld, then the influence of either site of episode or the status of decision taker or information given should be related to the outcome variable irrespective of the perceived need for medical treatment. In a preliminary analysis both the site of the episode and the status of the decision taker appeared to be associated with the site and timing of the decision to seek medical care although the type of complaint seemd also to be related. Interestingly, the emergent nature of the condition as perceived by the patient also was found to be related.

A more comprehensive analysis was carried out which examined the relationship between the site of episode and the status of the decision taker and the site and timing of decision to seek medical care after allowing for a number of variables which were found to be related to the outcome. The results of this analysis showed that one of the factors associated with the time period between onset of episode and decision to seek medical care is the status of the decision taker. Thus the suggestion that the C.S.A's proposals may be significant, led to an attempt to explain why this should be so.

Focussing on a number of different socio-environmental locations which involve a number of different actors with different statuses an attempt was made to answer the two different but related questions.

1. Why are decisions to seek medical care made by certain people in different locations more likely to lead to the use of an accident and emergency department than the use of the G.P.'s service.

2. Are certain people influenced by non-medical considerations in their assessment of the need for medical attention?

In attempting to answer both these questions the method of investigation was to ask people such as policemen, teachers, employers, passers-by and the sufferers about how they acted, why they acted in a certain

way and how their pattern of action fitted in with what they normally did. It was assumed that through people's accounts of how and why they acted this would lead to understanding of the circumstances which influenced them at the time. Obviously, the more ideal methodology would be to have observed these events as they happened and the researcher could have made his own judgements as to the nature and significance of the circumstances on the pattern of action undertaken. However, given the unpredictable nature of such events the practicalities of such a research study proved too difficult to manage.

The weakness with the approach adopted in this study is one which can be identified in the sociological literature as a controversial issue. Is it possible for a sociologist to identify social conditions which influence in a quasi-causal manner patterns of human action and relations? Or are these patterns merely the product of the perspectives of the participating actors? The argument in the latter case is that the actors may not be aware of the broader influences on their action. On the other hand, the sociologist is only offering a different account of events which has equal status to those of the actors, ie., commonsense accounts are of equal validity to scientific accounts.

The crux of the matter is whether people give the 'right' reasons for behaving in a certain way or whether there is no particular correct account. For example, in what ways do stress or pressure influence human action? Can actors recognise the influence of stress on their behaviour. Do they know the 'real' reasons? Who defines what the 'real' reasons are?

In this study by questioning actors certain clues were gained about the pressures that they were under when making decisions in certain circumstances.

Results from the interviews with employers, teachers, police and bystanders showed thatin each of these different roles there are considerable variations between and within the circumstances that lead to decision taking. Whilst it is not proposed to discuss here these findings further it is evident that these people have to take into account other considerations in deciding when and where to send a person for medical treatment other than their medical knowledge. Certainly the incompleteness of their medical knowledge is important, but there are other non-medical considerations which appear to be relevant when decision making occurs in the home environment.

The home environment is important because it not only highlights the tendency for a person to contact his G.P. but also that, irrespective of circumstance, thereis a group of patients who go direct to hospital without attempting to contact a G.P.. This suggests whilst circumstances may be important, they do not account for all the major groups who utilise the accident and emergency department. Dissatisfaction with G.Ps., beliefs that G.Ps. would not treat or would be too slow, didn't have a G.P., G.P. would not be available, are all reasons given by patients or patients' families for not attempting to contact their G.P.

The implications for policy

From the evidence presented above, the C.S.A's proposition that the significant element in explaining patient utilisation of the accident and emergency department is circumstantial, might be one which is well founded. The results from Table 8.1 suggest that when circumstances are defined in terms of the site of the decision to seek medical care and the status of the decison taker, a maximum of two-fifths of new patients fell into this category. Two other major groups made up the patient load. Just over a fifth attempted to contact a G.P. (a third of these being unsuccessful) and another fifth went directly to the hospital from home without being influenced by this circumstantial element.

In the introduction the C.S.A's propositions were described in detail and it became clear that in contrast to other medical groups involved in the area of casualty medicine, they saw the casualty doctor as specialising in 'generalist'medicine. This 'generalist' would complement the other 'generalist', the general practitioner, in the supply of primary care services. Unlike the other medical groups who wished the department to develop on parallel lines as other outpatient departments with an emphasis on developing clinical specialty and patient access to the department being controlled by professional colleagues, the C.S.A's approach appeared to be more accommodating to patient needs. The C.S.A. appear to be willing to extend their work to include patients or others in the community who are in 'social predicaments' ie., those people who had no realistic alternative but to go to hospital. They proposed that patients should routinely go to their G.P. for all matters of health including traumatic conditions but only when these routines are disrupted (ie., in an emergency) should the hospital be used.

In one sense this approach is sensitive to patient needs in that in this study two-fifths of the new patients came directly to hospital from

a 'community' situation. However, in another sense the C.S.A. may wish to develop the specialty of the 'community emergency' service and so to control the patients' access to the department and to exclude those patients who are not in 'emergency' situations and who have by-passed their G.P. In inner urban areas there is evidence that casualty departments are being used 'as family doctors' by some groups. However, in this study only a very small proportion of patients said that they went to the hospital routinely for all types of ill-health and only 3% were not registered with a G.P.

It appears that in this particular geographical area the majority of the population use the G.P. as their central focus for health care which appears to suit the requirements of the C.S.A's proposals. However, evidence from both the circumstances that led patients to utilise the hospital in the case study and from patient responses to hypothetical questions about their choice of medical care systems for a variety of complaints, shows that for particular traumatic conditions the hospital is seen as the most appropriate place for medical care. In addition and connected with the latter is that some patients perceived their complaint as warranting urgent medical attention and the hospital was the most appropriate place to go for that. In other words, their is a group of patients who utilise the hospital specifically for treatment for certain types of condition which they believe require immediate medical attention and their G.P. is believed to be inaccessible or unavailable.

The C.S.A. may define this latter type of attender as an illegitimate user of the service. They argue that irrespective of the type of complaint or the perceived severity or urgency with which medical attention is required, this group should make an attempt to contact a G.P. The legitimisation of patient utilisation of the department on the basis of lay diagnostic criteria would, according to the C.S.A., lead to a system similar to the 'polyclinics' found in urban areas in Russia where ambulatory care is available in clinics attached to hospitals. This would put the hospital doctors at further risk of low professional prestige with its attendant staffing difficulties. They are also, for similar reasons, against the proposed rationalisation of G.P. services leading to G.Ps. being situated in health centres or hospitals.

Evidence from the study suggests thatthe reasons for self-referral did not seem to be linked with patients becoming more hospital oriented in terms of their preference for high technological medicine, as was speculated upon in the introduction, but patients no longer felt it .

worthwhile attempting to contact a G.P. in situations where medical treatment was needed for certain types of conditions. This belief about the inaccessibility or the unavailability of G.Ps. does seem in some cases to be a realistic one. (Just over a third of patients who attempted to contact a G.P. never spoke to or saw him). In addition, there have been campaigns exhorting patients not to waste their doctors' time with trivial conditions although it is not clear how patients are expected to make assessments of the seriousness of their conditions given there is little consensus about the meaning of signs and symptoms within the medical profession itself. The pressure on the patient to call an ambulance or go to the accident and emergency centre is further heightened by the closure of local community hospitals or closing down of departments which are imperative for the delivery of a casualty service, e.g. radiology departments.

On the other hand whilst this group of patients (who according to the C.S.A. are not legitimate attenders) is of a substantial size, it is surprising more 'overutilisation' does not take place. It appears that some form of informal control seems to be taking place.[1] Roth (1971) suggests that patients have yet to understand the 'non-urgent' function of the department. Data from other studies (Roth 1972, Gibson 1978 and Jeffereys 1979) imply that patients' access to the department is controlled through the informal social organisation of the casualty department or emergency clinics in terms of the way the staff 'typify' patients. These typifications contain social and moral as well as clinical elements. It is claimed that they are related to the action that staff take towards the patient. These typifications may therefore fulfil the function of controlling patient access as well as protecting and maintaining professional autonomy. Patients may be inhibited about using the hospital for other reasons such as the time spent waiting for treatment. Certainly, this was the major reason given by patients in this study for being dissatisfied with the service that they received. Alternatively, the explanation may lie with patient expectations and needs. On the one hand the hospital service may

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1. Apart from the patient having to go to the hospital rather than have the professional visit the home, the accident and emergency department has a number of structural characteristics which should suit the needs of the potential patient. For example, the department provides a 24-hour service, no formal organisational arrangements such as appointment systems, the department has access to all the technological facilities available in hospital, specialists are on call and in theory in easy reach and also the department provides for admission to the hospital.

seem attractive for the treatment of certain types of conditions such as trauma where the degree of uncertainty about diagnosis and prognosis is small or where the patient requires anonymity or for the treatment of certain age groups where more emphasis is placed on speed and efficiency. On the other hand, for some conditons and for some age groups particularly parents of young children, a more expressive or personal relationship between patient and doctor is required. The patient may believe that the G.P. is the most appropriate place for this type of consulation.

In conclusion, the results from this study imply that the C.S.A's proposition that emergency work should be and is defined in terms of social circumstances appears to be well-founded. Thus the proposition that the service should be seen as a 'community emergency service' appears to be a realistic principle on which the service could be organised. However, some patients utilised the hospital for reasons other than those that could be termed circumstantial. Many of these patients required medical treatment quickly and saw the hospital as the most appropriate place for obtaining it. If it is planned to re-educate these patients to use their G.Ps. at all times, even in situations which patients believe are emergencies (defined in lay terms), then the patient population needs to be convinced that the 24-hour G.P. emergency service is working effectively and that facilities are available at G.P. surgeries for treating minor trauma. Certainly, policy-makers and planners must come to terms with the fact that patients have the ability to make choices between services using their own knowledge and that in the case of traumatic conditions the hospital appears to be the more attractive setting (at least initially) for medical treatment.

Table 8.1 Status of person who made the decision to seek medical care, site of decision to seek medical care and attempt to contact a G.P.

	No.	%
Decision to seek medical care made by patient or by patient's close relatives at home - no attempt to contact a G.P.	137	21.8
Decision to seek medical care made by patient or by patient's close relatives at home - unsuccessful attempt to speak to G.P.	39	6.2
Decision to seek medical care made by patient or by patient's close relatives at home - spoke to and/or saw G.P. before going to hospital.	57	9.1
Decision to seek medical care made by other person at home - no attempt to contact a G.P.	20	3.2
Decision to seek medical care made by other person at home - unsuccessful attempt to speak to a G.P.	1	0.2
Decision to seek medical care made by other person at home - spoke to and/or saw a G.P.	3	0.5
Decision to seek medical care made by patient or by patient's close relatives at site outside home - no attempt to contact a G.P.	131	20.9
Decision to seek medical care made by patient or by patient's close relatives at site outside home - unsuccessful attempt to speak to a G.P.	5	0.8
Decision to seek medical care made by patient or by patient's close relatives at site outside home - spoke to and/or saw G.P.	16	2.5
Decision to seek medical care made by other at site outside home - no attempt to contact a G.P.	102	16.2
Decision to seek medical care made by other at site outside home - unsuccessful attempt to speak to a G.P.	7	1.1
Decision to seek medical care made by other at site outside home - spoke to and/or saw G.P.	12	1.9
Not answered	98	15.6
Total	628	100%

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